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AGRONOMY;

OR THE SCIENCE WHICH RELATES TO THE CONSTITUENT PARTS AND PHYSICAL PROPERTIES OF THE SOIL, &c.—NO. 1.

This is an important and interesting subject, and one with which every farmer should make himself familiar, in order to form a just appreciation of the nature and properties of the soil with reference to agriculture in general. We propose in a series of articles, which will appear in consecutive numbers of the Valley Farmer, to say something on the subject.

The soil bears the same relation to agricultural industry that the raw material does to manufacturer in general. The intelligent farmer endeavors to find land that will unite all the qualities he requires, with the same anxiety and care that the manufactures bestows on the selection of the materials best adapted to his purpose. Each of these persons exercises his best judgment in forming a just estimate of the value of the article he is about to purchase. Each of them, also, when he has obtained the land or material which he requires to work with, examines its merits or demerits, and gives to each of its parts that destination for which it appears to be best adapted, and by means of which he may derive the greatest possible amount of profit, both for the substance itself and from the labor which is applied to it.

The manufacturer loses both time and money when he attempts to fabricate fine cloth from coarse and inferior wool, and lessens the value of the material when he endeavors to make coarse cloths from superfine wool. He must therefore, divide and arrange all his wools according to their various degrees of fineness. In the same way the farmer must understand the nature and chararter of the soil which he has to work on, and the labor he applies to it; if such be his aim, it can only be effected by means of a judicious selection of crops, based upon a thorough knowledge and just appreciation of the nature and properties of the soil in which they are to be grown.

The rudiments of the crops furnished by nature, are to the farmer what the designs and models fashioned by art are to the manufacturer. The principal aim and study of the farmer should be to allot to each of the various crops he proposes to cultivate, the soil which is most proper for them, and to bestow on that soil that kind of cultivation best adapted to its nature; and the more thoroughly he has made himself acquainted with the properties of the land he has to work on, the more successful will he be.

But a just appreciation of the nature and properties of the soil, can only be founded upon correct notions of chemistry and of physics.—Although practical knowledge, acquired from long experience, may be sufficient to enable persons to recognize and appreciate certain particular kinds of land, yet it can never be applied generally to all varieties. Experience with respect to one kind, would only lead to error, if the results deduced from it, were applied indiscriminately to all others, many of which are of a totally different nature, although, perhaps apparently the same to one whose knowledge is merely superficial and not based on science and a proper study of the subject.

We shall now, therefore enter into a more minute examination of the different kinds of land. In order that we may be able to profit by the experience and discoveries of learned men, it is highly necessary that we should enter the domain of Natural History, and endeavor to acquire clear and distinct ideas of all the constituent parts of the soil and of their proper-

ties; and as these considerations will lead us to the theory of manures, or of the chemical amelioration of the soil, they will prepare us to enter upon the subject when it comes before us.

The surface of our planet being composed of that loose, friable matter, which we call the *soil*, or in other words, the earth, is made up of a combination of heterogeneous substances. In common language we call this mixture, "earth;" though it contains substances not properly embraced in this term. The constituent parts of this mixture are the earth's *silica*, *alumina*, lime, and sometimes *magnesia*; portions of *iron* and other elementary substances are also found in it, but these latter are always in smaller proportions than the earth's. Besides these simple substances, fertile land contains a variety of other matter, which, on account of its friable character, has been called *mould*, *vegetable* mould, &c.; and which differs so materially from earths, properly so called, that it ought never to be confounded with them. In order to distinguish it from the primitive earths, it is also designated by the Latin word "*humus*."

One of the principal distinctions between *earths* and *humus* is, no agent has yet been discovered by means of which the former can be decomposed; they appear to be immutable, and cannot be destroyed or essentially changed by any known power in organized nature. The *humus*, on the contrary, is very susceptible of decomposition; it is a matter produced solely by animal and vegetable life, and can be changed and destroyed in itself and by itself, and particularly by the action of exterior bodies. It is reproduced on the surface of the soil by organic action, and consequently at different periods, and is found even in the same place, to vary in quantity as well as quality.

We will commence by considering these immutable earths which form the basis of the soil, and which are termed "elementary earths:"—From the position in which these earths are found, being mingled together on the surface of our globe, it appears probable that they did not originally exist in the pulverized state in which we now find them, but rather that they were in a solid mass. This solid mass has been gradually loosened and worn away by the action of fire, air and water. It is well known that lands situated above the level of the sea, attract, in proportion to their magnitude, a larger portion of that aqueous vapor which the heated atmosphere continually absorbs from the surface of the seas and lakes; by this means the higher regions become reservoirs of water, which occasionally falls and runs down the declivities with great velocity, irrigating the valleys and plains below, and carrying with it fragments of earth, rocks and stones of all sizes, which are deposited at the bottom, and successive layers of earth are thus formed. There can be no doubt that the strata of earth which we meet with, especially in countries bordering on mountains, have been produced and transported there by continued rains and inundations throughout a long series of ages.

On plains and flat surfaces like our extended prairies the layers of earth are generally found to be depositied in a horizontal or slightly inclined position. Sometimes these layers extend in one uniform thickness and similar composition for an immense distance, so that they appear to have been gradually deposited over the whole surface, one after another, by repeated and general inundations. At other times they form a kind of bank, thrown up, as it were, at different periods by currents of water, or are forced into the clefts and cavities of the rocks in jets or veins; they are also frequently found heaped irregularly together, as may be seen in many places in the rougher portions of Kentucky, forming a promiscuous mass of earth and stones, which has every appearance of having been torn up and thrown together by some convulsion of Nature.

Geologists generally divide the rocks into two grand divisions, distinguished by the names of *primary* and *secondary*. The primary rocks are composed of pure crystaline matter, and contain no fragments of other rocks. The secondary rocks, or strata, consist partly of crystaline matter, and contain fragments of other rocks or strata, and often the remains of vegetables and marine animals, and sometimes the remains of land animals. Rocks containing these marine animals are familiar to almost every western inhabitant. The number of these primary rocks, which are commonly observed, are eight.

It is but about one hundred years since chemists have admitted the existence of only one elementary earth, which they supposed to be the principal constituent portion of our globe, indistructible in the highest degree, and entering more or less into the composition of all solid bodies. It was not till within this period that the difference between *silica* and *alumina* began to be perceived. *Lime* was not included among the number of earths, but regarded as a compound body. But, as chemists extended their researches further into the mineral kingdom, they began to appreciate the principal characteristics which serve to distinguish, not only the elementary earths already known, but

also several new substances, which were included in the mass of bodies which do not admit of decomposition.

Silica and *Alumina* are the most abundant of all the earths, and we may also add, their properties are the best defined. Next to them, *lime* is most abundant, and presents the most marked characteristics; but it resembles the alkalies more than either of the former, which possess no alkaline nature. *Magnesia*, which was so long confounded with other earths, has at length been recognized as a distinct substance. It now forms a connecting link between the insoluble earths and the alkalies, and the connection thus formed may, for the present, justify the association of all the natural crude earths in one class.

The earths are indistructible by fire, and they may be exposed to the most violent heat without volatilizing. They are all infusible when exposed seperately to the action of heat; neither can they be fused in a fire fed with oxygen gas; but it is a very remarkable fact that they lose their character when several of them are mixed together. Silica, lime and alumina are infusible when exposed separately to any degree of heat, but are easily melted when put together in a mass. After a great number of experiments, it is found that the earths have no affinity for oxygen, and for this reason they are incombustible.

The color of all earths is pure white, the hue which they exhibit in their natural state arises from the admixture of other substances, and chiefly of the oxyde of iron in various modifications.

The earths differ from one another in their relations to water. Lime, and some other earths are slightly soluble in water. Lime requires 680 times its weight of water to dissolve it completely: Alumina and silica are absolutely insoluble. All earths, however, contract a mechanical union with water, and retain a greater or less portion of it after admixture.

As there are many soils which absorb water in larger quantities without permitting it to drain away, and, nevertheless, allow it to evaporate with greater or less facility when they are heated, it is necessary to pay attention to this tendency.

The earths, and especially alumina, never entirely part with water, but retain a portion of it even when they appear to be perfectly dry; nor can they ever be altogether deprived of it, except by exposure to a very high degree of heat.

In our next we shall speak of those simple, insoluble substances, called "Silica" and "Alumina" in their state of chemical purity, and point out their leading properties.

CHINESE HEMP.

In the November number of the Valley Farmer we published some account of a new variety of hemp, grown by W. L. Vance, Esq., of Woodford County, Ky. We had heard much of the extraordinary character of this hemp, and in order to satisfy ourselves of its real merits, and to give those interested in the cultivation of hemp, some reliable facts in regard to it, we visited the farm of Mr. Vance, just at the time the hands were engaged in cutting it. There were thirty acres of it in one field. The land was somewhat rolling, and the soil much worn and uneven, and yet the growth was very uniform, averaging about ten or twelve feet in height, many of the stalks measuring over thirteen and one half feet high. There were a considerable number of farmers and hemp growers present, and it was agreed to appoint a committee who should measure off two acres of an average quality of the hemp, and have it stacked, rotted, and dressed, and report the quantity of merchantable hemp produced. We received the report just as our last number went to press.—The committee, Messrs. James McKee, George Rogers and Voorhis, state that they have been hemp growers for twenty-five or thirty years, and have known the field on which the Chinese hemp was grown for the last twenty-five years, and that it has been in cultivation in corn and small grain the most of that time by tenants, and do not believe it would bring a crop of the ordinary kind of hemp. They state that two acres of the hemp was measured off by them, and that it has been spread, rotted, taken up, and dressed under their observation, and the hemp accurately weighed, the two acres yielding 3481 lbs., or 1740 1-2 pounds per acre. The committee state that in a more level and better portion of the field, if the product had been weighed it would have yielded two thousand pounds per acre.

We met a few days since with Col. C. J. Sanders, the government hemp agent, who informed us that he had examined the fiber of the Chinese hemp, and found it of extraordinary strength. He has sent a quantity of it, that has been water rotted to the Washington Navy Yard, where it is to be submitted to the tarring process, and its quality fully tested. He has promised to furnish us the result of the investigation. Considerable quantities of this hemp have been sown the present season in the neighborhood, which will afford more conclusive evidence of its value. We shall notice it with some interest, and publish the result of our observation.

RED CLOVER---VARIETIES.

A correspondent writing from Clarksville, Tennessee, enquires whether there is more than one variety of red clover usually cultivated, as it has been suggested by some of his neighbors, that the kind now cultivated does not grow as large as formerly on their fresh land. There are numerous plants more or less cultivated resembling clover, and hence some confusion has arisen in the popular names.

There are at least two distinct varieties of red clover (Trifolium Pratense) cultivated. The largest variety is seldom found in the South and West, but is cultivated to some extent in the Northern States. It is sometimes known by the name of *green clover*. It is characterized by slower growth, greater strength, and abundance of leaves, and a larger proportion of green parts to the flowers. It comes into blossom later, and attains greater height and strength before it ripens, and may therefore be left standing for a longer time. Where stall feeding cattle is practiced it is peculiarly valuable, because it retains its nutritious properties longer than the common clover, and grows to a larger size. But the variety now usually grown is the best for our climate. It flowers more quickly, and affords one crop for hay or pasturage, and a second crop for seed.

White or Dutch (*Trifolium repens.*)—There are various kinds of clover which bear white flowers. Some of these are known to sport and change color. But the name of white clover is almost always confined to the species which is indigenous on almost all moist, clayey soils in our climate; it forms, indeed, part of the natural sward, and even if not perceived at first sight, it is soon discovered on closer inspection. On soils which have been manured with substances congenial to its nature, such as lime or ashes, it soon shows itself, and grows with such luxuriance that some persons imagine that it springs forth without seed. It will be observed in many parts of the country the present season in much greater abundance than usual; perfuming the air for a great distance with its peculiar richness of fragrance, and affording an abundant pasturage for bees.

Strawberry Trefoil (*Trifolium fragiferum*).—This is a species very similar to Dutch Clover, both in nature and appearance. It is distinguished from the latter by its heads which are in the form of strawberries. Its foliage grows somewhat more in tufts. It was probably first introduced from England.

There is a large variety of white clover in our Western soil known as *Buffalo Clover.*—The leaf and blossoms are nearly as large as the common red clover, but the stem is not quite so long. We have never yet found it to seed well.

Lucerne (*Medicago sativa.*)—This variety is also sometimes known under the name of *Chilian Clover.* It is a long tap rooted plant, suited to a warm climate, and thrives admirably upon a warm loamy soil containing lime. It withstands extreme drouth better than most any other plant, owing the to depth to which its roots descend. It is extensively used in some countries for summer soiling or stall feeding, and will bear cutting many times during the season. It is perennial in its growth.

Bokhara Clover (*Melilotus Major.*)—Sometimes called sweet clover. It is a coarse plant, rising to six and ten feet high. It will admit of being cut four or five times in the season, and yields a large quantity of herbage for soiling.

None of these varieties, however, are found superior to the medium or small red clover for general cultivation for the Western farmer.

CULTURE OF BUCKWHEAT.

In the early period of our country, Buckwheat was grown for horses and other farm stock, but within the last forty years, great improvements in preparing and grinding the grain have rendered it among the luxuries of the table, and have caused a great increase in its cultivation. It is a crop that is easily grown, requiring comparatively but little labor, and may be sown on oat or wheat stubble, and thus securing two crops from the same land in one season.—Although a cooler climate is better suited to the growth of buckwheat, yet good crops are often grown in our western climate. It leaves the ground clear and in most excellent condition for a spring crop. The most suitable time for sowing buckwheat is from the 1st to the 15th day of July. Let the ground be well prepared, and sow half a bushel of seed to the acre. Buckwheat will continue to blossom through all the season, if sowed early, as it is sometimes done for bees, but it does not begin to seed well until the cool weather of fall sets in, consequently it is generally most heavily seeded just about the time the first frosts set in.

Careful farmers generally cut buckwheat with the cradle, and put it up in small loose cocks or bundles to cure; others mow it with the scythe.

In any event it requires careful handling, as it is more easily shattered than any other grain.

The *haulm* or straw of buckwheat, when properly cured and sheltered from the weather, is equal to clover hay as food for cattle in winter

Brandy, Alcohol and Paper from Sugar Beets.

A writer in the "Country Gentleman" of May 1st, states that the beet root and mangel wurtzel have of late years been cultivated to a great extent in France, for the purpose of manufacturing brandy therefrom, and that the manufacture or distillation of brandy has proved to be so much more profitable than the manufacture of sugar, that many large establishments formerly used as sugar factories have been re-moddled and converted into distilleries for the preparation of brandy from the same species of roots. He also asserts that the subject is attracting the attention of enterprising agriculturists of Great Britain, and thinks it not undeserving of notice among the agriculturists and distillers of alcohol, *for use in the various arts*, on this side of the Atlantic. The remaining pulp, after the juice has been extracted, is not only used as food for stock and fattening cattle and sheep, but as a material for the manufacture of paper. The writer estimates the yield of these roots per imperial acre in some districts in Great Britian, as high as 40 tons, probably by means of liquid manuring, and an average crop under proper tillage, at from twenty-five to thirty tons per acre. And from the best authorities he estimates, that one hundred pounds of field beets will yield from ten to twelve pounds of proof spirit, which is equal to six and a half quarts and upwards, or one hundred and twenty quarts of proof spirit per ton (2240 lbs.) of beets. The produce of one acre will thus yield, according to his calculation, from three thousand to three thousand six hundred quarts of proof spirit. This, at the price of two to four shillings per gallon, is equal to from $375 to $750 per acre for the spirit alone. In addition to this is the value of the pulp for fattening stock; and for the manufacture of paper it is estimated to be worth fifty dollars per ton.

With such views in regard to this new mode of employing an important agricultural product, the writer solicits the attention of some of our more enterprising men, both farmers and distillers to the subject.

Now, it is well known that sugar, of the purest quality, and to a very great extent, has, since the reign of Napoleon Bonaparte, been manufactured in France from the beet root. In 1838 the Philadelphia "Beet Sugar Society" employed Mr. James Pedder to visit France for the purpose of learning all the practical details of the manufacture of beet sugar. Mr. Pedder spent several months in France, in some of the largest establishments, and took part in the various manufactories of sugar making, and on his return to the United States the attempt was made in Philadelphia, Burlington, N. J., and other places to manufacture sugar from the beet, but in every instance the efforts to granulate the syrup resulted in entire failure. The cause of the failure to produce sugar from the beet in the United States, we presume is owing to our defective climate, in not maturing, in that full perfection, the saccharine juices of the beet necessary for the production of sugar. After expending large sums of money in costly machinery and fixtures, and in repeated trials, the project was abandoned.

Admitting that the manufacture of brandy or alcohol from beets in the United States to be practicable, we think that such a proposition should be repudiated and condemned by every lover of his race. If alcohol, to be employed in the arts, if you please, can be made from the beet, it would not be confined to that alone, but would be converted into various compounds, and sold under all the different brands of *wine*, *rum*, *brandy*, *gin*, &c., as the pure article. But the beet can be successfully grown only in the northern portions of the Union, and not even then to the extent per acre that it is estimated by the writer, and even in England and France such crops as he stated, we believe to be of rare occurrence. But as we have said, it has been ascertained that sugar cannot be successfully made from beets grown in this climate, and if sugar cannot be made from the beet, neither can alcohol or brandy.

While Indian corn can be grown for twenty-five or fifty cents a bushel in the United States, it is hardly advisable to recommend the sugar beet as a substitute for the manufacture of alcohol, even aside from the horrid aspect of the question.

Besides the hundreds of villainous compounds, of which whisky forms the base, that are now manufactured in the United States, and sold under as many fictitious names, and which are spreading desolation and death throughout the land, France is importing annually from the United States thousands of barrels of whisky, at a cost of, say twenty cents a gallon, and which is returned to us as pure Cogniac brandy, and for which the consumer pays from two to four dollars per gallon, one half of which goes into the United States Treasury in the form of specific duties.

While thousands of tons of flax are grown in the United States, for the seed alone, and the fiber allowed to go to waste, it is hardly to be expected that the fiber of the beet root would be used as a paper material.

CLOVER SEED.

The following communication was received after we had written the articles on "Clover and Clover Seed," for the May and June numbers of the Valley Farmer, and although we have anticipated the wish of our correspondent, we nevertheless publish his communication on account of the valuable hints it contains, so important to every farmer in the State:

EDS. VALLEY FARMER:—I have read with much interest your articles in the February and March Nos., on the culture of the grasses, and as there is one other feature of this subject not particularly mentioned there, which just now bears very heavy on my purse, and consequently on my mind, I would like to hear from you or some of your correspondents,—and this is the production of clover seed. I wish you would inform your readers whether we cannot profitably raise our own clover seed, and in order to come to this result, we would like to know how much seed can be raised on an average from an acre, the proper method to raise and clean the seed, the cost of good clover hullers, and whether it can well be separated from the straw without the use of threshing machines, and finally the cost of raising a bushel of seed.

The present price of clover seed, (from ten to twelve dollars per bushel) is, to my mind, a most unreasonable burden to the farmers of Missouri.

And when we take into consideration that the use of clover is the most potent lever of agricultural improvement in our State, the high price of seed becomes doubly interesting—not only bearing upon our purses, but causing sterrility in our soil, and thus striking directly at the agricultural resources and prosperity of our State. It is futile to expect the farmers of Missouri to any extent to improve their farms by the use of stable or other concentrated manures. How is the farmer, that raises from forty to one hundred acres of corn, yearly, to keep up the fertility of his soil? It is very questionable even if he had exhaustless stores of manures piled up, whether he could afford to haul it out to any extent.

It must be done by rotation, and in this plan clover is the all important crop. Instead of its being a great expense to reclaim or keep up the fertility of a farm, by the use of clover, it is a source of direct profit, as perhaps the clover crop is the most profitable one in the rotation.

But there is another aspect to this case, besides the reduction in the price of clover seed, contemplated by more information being solicited as to the manner and profit of its culture. The production of every article of home consumption, as far as it can be done economically, is the true source of individual, as well as national *independence* and wealth. Instead of being dependent on Ohio and other States for clover seed at a high price, with freight and speculator's profits added, we should raise our own seed and sow with an unsparing hand. The great basis of success in this enterprise we most unquestionably possess, and that is a soil and climate peculiarly adapted to the growth of clover.

The county of Howard last year imported about six hundred bushels of clover seed, which at last year's prices, ($9 00 per bushel,) would have amounted to five thousand four hundred dollars, and this sum could have been saved to the county without materially lessening any of its exports. If half of the stimulus had been given to western farmers to raise their own clover seed that has been given by western journals—the Valley Farmer among the rest—to induce them to embark in the culture of flax for *seed*, we might have been spared the humiliation and expense of paying from ten to twelve dollars per bushel for foreign seed, the purity of which according to a certain *political* party is a little suspicious. I do not know that *Washington* ever said that foreign *clover seed* was not to be trusted, but we have found out that it sometimes fails.

I am sowing some now that has some villianous looking seed in it. If they should turn out to be the Canada thistle or daisy, then my farm will be for sale. I sincerely believe that if the Missourians were reliably informed of the profits and manner of raising clover seed, and the cost of necessary machinery, and properly encouraged by the Valley Farmer, (for it has great influence with them) we should raise enough in a few years for home consumption, if not for export. We can and do raise every other agricultural product to which our climate is adapted, cheaper than any other State, the difference in freight, commission, &c., being against us. If you believe this subject worthy the attention of your journal, I hope you will lay before your readers the information called for in this article. For if he is a public benefactor who causes two blades of grass to grow instead of one, what will be thought of him who causes one hundred seeds to grow in the place of one. H. L. B.

Fayette, Howard Co., Mo.

GARDENING.

Of all physical pursuits the horticultural seems to us to possess the most of the intellectual and moral and to be most worthy of universal practice. Gardening is not a stupid use of the spade and hoe; not an ignorant wear of bones and muscles; not a physical drudgery unilluminated by the light of mind. There is no pursuit which pays a better percentage on intelligence, or rewards study and culture more liberally than this. An ignoramus cannot make a garden, cannot produce the dainty and half-sentient plants and shrubs, fruits and flowers that delight to adorn a well-made garden. Nor can a wicked man make a garden, for the very labor is so virtuous and beautiful that it will rebuke him, and the things that he produces will preach him sermons on morality and virtue.—How can a man be wicked amid a luxuriance of flowers and fruits which his own hands have produced? How can he meditate evil while engaged in pursuits so genial, requiring so much knowledge, care, taste, and labor? In the idle mind wicked thoughts have the most ready and luxuriant growth. Not in the mind well employed do they find a genial and fruitful soil. Can a mind be better employed than in horticultural pusuits? Can anything be more delightful than to see the productions of a garden springing up around one like his own children? Can any study be more delightful than that which relates to these productions? Or more profitable, or more salutary? This is practical botany, science in labor wisdom, in deed. If every man, every family had a garden and cultivated it intelligently, as they could easily be taught to do, should we not have quite another world from the crazy, ignorant, wicked, sickly one we now have? I would not ask that any one should spend all his time in his garden; only that spare moments, odd hours, leisure seasons, should be spent in an intelligent culture of garden productions. If the merchant would leave his counting room, the mechanic his shop, the teacher his school-room, the farmer his field, the minister his study, the woman her house, and go into the garden one hour each day, and systematically and wisely spend that hour in actual garden labor, would not each one be healthier, wiser, happier, and just about as rich? Would they not in their other pursuits accomplish just about as much? And would not such labor exert a most salutary influence on each one's moral and domestic life?

We look upon gardening, as of all others, the most natural pursuit of man. When man was created he was put into the garden to dress and to keep it, (Gen. 2: 15). This was before he had transgressed any of the laws of his Maker. Then primitive man was a gardener. Was he not the type of what all men should be, before his transgression? He was innocent, he was obedient, he was actively employed in keeping and dressing the garden. He was no idler, no waster of time, no stupid dolt who gave no attention to what he should do and how he should live. He cultivated his garden and no doubt partook of its fruits and enjoyed them. He reaped and ate of the fruits of his own labor, and no doubt enjoyed them and slept sweetly amid the productions of his own hands. It seems to us that all men should be like him; should possess and cultivate a garden. The soil is their mother. From her fertile bosom they draw their nourishment. Shall they turn away and forget her? Shall they practically dispise her, and like a rebellious offspring, leave her wholly to the care of others? To us it seems like fillial impiety. We would not chain all men to the soil all their days, and permit them to pursue no other avocatians. We are not such enthusiasts as this. But if we could, we would have every family have a home of its own and have that home in the midst of a garden which should be well cultivated. We would have the business of cities confined within as narrow limits as it well could be, and have all the dwellings set back and scattered over the suburban regions, each one surrounded with a neat and fertile garden. We would have every man slee, amid fresh air and growing vegetation. We would have no garrets and cellars filled with miserable human beings, worn out with toil, or disease or vice. If common decency and humanity would not forbid it, we would have a strong law prohibiting any such debasing use of the soil of the Father's earth. No tyrant landlord should exact and extort the life-blood from widows and orphans and unfortunates. And we believe if all families were gardeners there would be few such. We like merchants, mechanics, professional men and all good citizens, and would not ask that they should neglect their several avocations. We would have them pursue them faithfully. But while they do it we would urge that they should all live in gardens as did Adam, and dress and keep them. Thousands might have airy, beautiful gradens, who now dwell in pent up cities amid pollution and crime, if they would strive for them. How easy for villagers to have the most beautiful and productive gardens? But we ought to say a word to farmers, for we may not again have a better opportunity.

Every farm should have its garden for the health and support of the family. Garden vegetables, fruits, roots, plants, berries, &c. should be the daily food of every family. They are better than pills and powders, drugs and drams, and a great deal cheaper. A good garden is better than a doctor or a drug shop. And it will do more to supply a family and enable them to live as sociable beings, than almost any thing else. Western farmers are greatly at fault in this respect. They do not make life so agreeable, or elevated, or useful as they might if they would cultivate good gardens.

HOW TO MAKE THE BEST PRODUCE.

In the last number of the Farmer we spoke of the best produce of a country. We concluded that the best produce of a country is its men; and that the best country is that which produces the best men. Now, the question is, how to produce the best men? It is an important question, the most so of any that can agitate a mind or a country. It is important to know how to produce the best stock, the best harvests, the best return for labor, but this sinks into insignificance in comparison with the importance of knowing how to produce the best men and women.

We know how to produce the best stock. First of all, we must have strong and healthy breeds. They must be well trained, well reared, free from blemish, sound, active, well-made, well-disposed; they must have such points as we want in their offspring. From feeble, sickly sires and dams, we never expect robust, healthy young. From deformed, ill-made animals, we look not for a complete, well-rounded, enduring progeny. We improve our animals, give them health, care, attention, culture, when we would secure their best offspring. Is not man subject to the animal and hereditary laws? Does he not impart his weaknesses as well as his strength to his children? Can feeble parents expect vigorous offspring? The law is that the parent imparts himself to his child. If he is weak, diseased, illy-formed, deficient in force of constitution or character, his child will be a partaker of his deficiency. Let such an one cure his disease, strengthen his weakness, improve his deficiency, before he presumes to become a parent.

In animals we seek to mend deficiencies by a cross of breeds and stock. If the dam has any weak point, we seek to make it up in the sire. If the dam is light and fragile, we seek for solidity and strength in the sire, and *vice versa*. By attention to these things, to animal physiology in the culture of animals, we can greatly improve their character and quality. The same laws hold good in relation to the production of human creatures. If we are wise, we shall recognize them. If parents violate physiological laws, they must expect to see the consequences in their children. If men and women were truly wise, they would choose companions in the light of science and law. They would be governed in their choice by the principles which determine the best interests of their progeny. They would at least use as much judgment as the stock-raiser does in the production of domestic animals.

Mental characteristics may be remedied or modified by a cross of character, just as well as physical characteristics. The same law applies in relation both to body and mind.

The matter of health is never forgotten in the production of domestic animals. The dams and sires must be in full health and strength; must not be over-worked or over-fed, or exposed to harm; must have quiet exercise, good air, food and care. This is infinitely more important in relation to the human kind. Health is the first requirement. No man or woman should become a parent except in good, if not in perfect health. This matter should be decided by judgment. As we choose the times when animals shall produce their kind, so should we choose those times for ourselves. In a word, all that is necessary to produce the best of animal races, is necessary to produce the best of the human race.

The rearing and training of men is a matter of infinite importance. From the start they should have the most judicious treatment, the best examples, and the strongest influences for good thrown around them. In the very first bloom of childhood the best principles of truth and right should be implanted in their minds. The young mind should be enriched with the best instruction. The garden of childhood should be guarded against every evil invader, every seductive foe of physical, mental or moral excellence. The child's energies should be developed, and all their strength devoted to good pursuits. It should be inspired with worthy aims, and taught to pursue its objects with an unfaltering determination to secure success. It should be thrown upon its own resources, taught to rejoice in the struggle for an honorable success in worthy pursuits. The child, the youth, the man, should be kept busily employed in something worthy of human aims and energies.

Let the coming race of men and women be thus brought into existence, reared and educa-

ted, and the world will see a harvest of humanity that shall do honor to the race.

Cisterns and Cistern Building.

In a previous number we have spoken of pure water as essential to health. We regard rain water as pure, fit for use. How to get it and keep it is the question now before us. To do this, cisterns must be made in the ground. The size of the cisterns may depend upon the amount of water wanted. They may vary from five to twenty feet in diameter, and from ten to twenty-five feet in depth. A deep cistern will keep the water cooler, and probably better. From sixteen to twenty feet is a good depth. We are of the opinion that excellent water can always be kept in cisterns of that depth. From six to nine feet is a good width for ordinary family purposes. They should be dug round, and with the utmost regularity: be perpendicular; the bottom smooth, and a little hollowed in the middle, to facilitate the process of cleansing, and give greater permanency to the coat of cement. A permanent clay soil is generally solid enough when well dug, and the sides well smoothed and cemented, to make a lasting cistern; but it is always best to brick over the bottom and sides. This gives the most reliable permanency if the bricks are properly laid. It prevents any watered pressure from bursting in, and makes the solid basis for the cement. The top should be arched over with brick, leaving a hole in the middle about two and a half feet in width, and arched sufficiently to sustain any pressure that may ever be expected to be put upon it. When it is thus dug and arched, or bricked, it is ready for the cement, which should be carefully put on at three coatings. Good hydraulic cement well put on, will make a permanent water-tight lining for the cistern, which is cheap, and not easily displaced.

The next important matter is the filter. Pure water cannot well be obtained in all seasons of the year without a filter. There are many modes of filtering cistern water. One is to dig a small cistern six or eight feet deep, near the main one, and fix a filter in the bottom of this, having first connected it with the main cistern by a lead pipe. The orifice of the passage to the main cistern is first protected by bricks or stones. These are covered with a strong coarse woolen cloth. Upon this is placed a layer of powdered charcoal; on this a layer of gravel; on this another cloth similar to the first; then charcoal and gravel again. The more of these layers the more perfect the filter. They must be so placed that all the water shall pass through them. The filter in all cisterns is made in the same way.

Another arrangement is to make two cisterns of equal depth, one much larger than the other, and connect them at the bottom with a lead pipe. Lay up a brick arch around the orifice of the passage in the large cistern, about two feet high, and make the filter in this. Let the water from the roof into this cistern. The main body of the water being in the large cistern, it will filter slowly, and the water will have time to settle all it will, before going through the filter. There is probably no better place for good water than this. The only objection to this plan is that if the filter needs repairing or replenishing, the water must all be taken out to do it.

Still another plan, is to make a large and small cistern, the large one about half the depth of the small one. Make the filter in the large one as in the last named plan. In this the water filters quicker, without time to settle; but the filter can be repaired without the loss of the water in the small one.

Some divide the filtering cistern with a brick wall, and place a filter in this and another at the aperture as above, making two filters. This doubtless will give excellent water. Whatever plan is adopted, care should be taken to do it well. Let all the work be done well, and of good material, and there can be no doubt of securing good water.

Hay Loading Machine.

We see it stated in Eastern papers that a machine for loading hay in the field has been invented, and is in successful operation. We have seen no drawing of it, nor any very full description of it, so we shall attempt to give none. It is now too late to order and send these machines to our readers for the present hay crop. But let all who use the pitchfork hope for help soon. If this invention proves successful, we shall expect that the next thing in this line will be walking barns, which will go about from meadow to meadow with self-working rakes and pitchforks, gathering in the hay crop and salting and packing it away for winter use. How pleasant it will be for the husbandman when he can sit it in his door and say, "Barn go into the meadow and fill yourself," and have it done. Truly, "man has sought out many inventions," and some have been good ones. Let the active mind of man work on. We believe in progress and improvement. Only let us be sure that an invention is an improvement, then let us accept it.

Clover Hulling Machines.

With the view to obtain all the information possible upon the subject of Clover Hulling Machines, we wrote to a number of persons in New York and Ohio who were familiar with them. The following letter is from the manufacturer of a machine which we have seen highly recommended and is in answer to our enquiries on the subject. It was received too late to be embodied in our remarks on Clover Seed gathering, in the June number. We omit that portion which relates to cutting and threshing clover, as that part of the operation has already been fully explained :

OVID, Seneca Co., N. Y., May 1st, '56.

EDS. VALLEY FARMER :—Your letter of the 14th ultimo is received. In answer to your inquiries in regard to my Clover Machine, I have to say, that in form it resembles a common fanning mill, having a cylinder and concave covered with hoop iron, upon which teeth are cut like the teeth of a rasp. The teeth are hardened by a peculair process, so hard that they will file iron, which renders them durable. The concave is in the form of a half-circle, and may be readily raised or lowered, as the condition of the chaff may require. The chaff, when damp, requiring that the machine should be set more closely than when dry. The machine hulls the seed when the chaff is damp equally as well as when it is dry, but damp chaff is apt to clog the seives more than dry, but the difference in the amount of work which a machine performs in a given time, is but slight, whether the chaff is dry or wet.

This machine requires only half the motion and half the power of a common machine for threshing grain, and in this respect possesses a decided advantage over all other clover machines now in use. I will warrant the machine to hull, clean and sift from two to five bushels of seed an hour, when the chaff is ordinarily well seeded, yielding from two to five bushels an acre, which is about the range of yield in this region of country. The machine is portable, weighing from seven to eight hundred pounds. The whole machinery for hulling and cleaning is contained in a single frame. It can be attached to and operated by any horse power used for threshing grain. In the Patent Office Report for 1851, the contributors for this county say, "Of the machines for hulling clover seed, the rasp machine is decidedly the best. It cleans faster, and with less motion however, than any other." My price at the shop is $110.

Should you desire any further information on the subject I will cheerfully furnish it.

Yours, &c., J. V. BLACKWELL.

A Little Excursion.

MR. COLMAN :—Having taken a little flight among the farmers of Pike county, Ill., I propose to pen a brief notice of it, by way of a spur to our readers. Pike county can scarcely be surpassed in many respects. Its land is rolling, its prairies small, its soil good, its people intelligent, its prospects for all civilized purposes fine. It is a delightful region of country—a little nook in that great, unsurpassed and unsurpassable garden of richness and beauty, composing the great valley of the West. It makes one's heart grow large to travel over any portion of this more than Million country. If a man is troubled with contracted ideas, let him go out upon our Western farms. If he has got any soul in him it will come out and grow. If one has any taste for soil-culture or soul-culture he must be delighted with the grandeur and excellence of this best country of the world. It almost makes me envy the farmer every time I go out and see the soil and opportunities he possesses, and I ask myself why I left the farm for the more arduous toils of the editor's chair and a city life. It certainly was not because I did not like agricultural pursuits ; no, for my heart yearns for them still ; but only because necessity seemed to require it, as dame Fortune had not willed me a farm that I could call my own, and the culture of mind seemed inviting to one ready for any toil, however great, if it could only prove successful. Well, the next best thing is to write about what we love to do.—But you, Mr. Colman, are the fortunate man who can do and write about what you love to do. Your farm and your paper give you a double share of the blessings of life. But see here, I am off from my subject. I am in Pike county writing of its farms. But much as I like them I have somewhat against their owners. I see in many places, a want of neatness and system in tha care of the farm, a negligence of fences, corners, borders, orchards, yards, buildings, which is truly reprehensible ; a waste of tools and implements, at once slothful and improvident, plows, harrows, wagons, fanning mills and even more expensive implements, standing exposed to sun and storm ; briars and weeds growing where corn and wheat ought to. I see many Osage Orange hedges—long rows of it, growing finely, two, three, four, and five years old, and not a single hedge properly trimmed and cultivated. Why, if Professor Turner or Mr. Logan Sleeper should see such hedges they would scold right smartly, even though they are good natured men. To let a hedge grow eight or ten feet high without ever cutting it down

but once, or perhaps not at all, and then two or three feet above ground, is truly shocking. These hedgers are the ones that will by and by complain of the Osage Orange, and call it a humbug. Corn would be a humbug were it not well raised. What is worth doing at all, is worth well doing. But I must stop.

The crops look finely. The harvests will be rich. This will be a great year for the husbandman. May the fruits fill his garners, the dollars his pockets, good sense his head, and good will his heart.

[Written for the Valley Farmer.]

HEDGE FENCES.

Messrs. Editors :—I consider myself pledged to write something every month upon this subject. And interest in the subject is not likely to decline. The following facts may surprise some persons, and yet they tell only of *small beginnings*, compared with the prospects opening to this enterprize.

A correspondent just informs me from Springfield, Illinois, that the leading Hedge Company for the principal prairie counties of northern Ills., (W. A. Allender & Co.,) have set twelve hundred miles the present season! Jos. Griffin, Jr., of Belleville, Ills., has set in three several counties, one hundred and fifty miles, the past spring. Messrs. McGrew, Leas & Co., of Kankakee, Ills., are progressing finely with the two hundred miles contracted two years ago to be grown on the Ills. Central Railroad, and their other extensive lines upon farms in that vicinity. And they have sold besides, to other parties, plants from their nursery the past spring to the amount of five millions! I have two and a half miles of hedge growing in the Florissant valley; I have one mile and a quarter within sight of Bridgeton; two miles and a half within sight of Upper Alton, and many other pieces in both States, which do not measure by the mile.

I have engaged to hedge around the Missouri Wine Company's Vineyard at Boonville. It is known that I have some of it set, and (strange to say, in this age of hair-splitting nicety) no one as yet, has criticised my temperance creed!

I will add a few hints which are designed to have a practical bearing, and which may be suitable to the season and apply to some cases needing them.

A young hedge, I find, can be very well shielded from injury in inclosures which cannot be exempted from use as pastures, by laying a medium sized rail, bedded close beside it soon as set, while the groundis mellow; it will be no hindrance to the growth the first summer.

To many hedges about here, Gophers are no small annoyance, especially the second year. I have observed that those hedges which are cultivated *well* are safest from their depredations. They are fond of the taste of the roots, and will eat them when young. But the Gopher is a very sly and shy "varmint" and prefers not to work about ground which is disturbed and worked by man. His *Gophership* prefers to distinguish himself by working in ground not otherwise disturbed at all; his nocturnal labors are directed rather to the spoiling of nice meadows and heaving up and spreading heaps of earth upon the grass. This is their regular, *professional* business, and they will not often turn aside from it to disturb a hedge that is well tilled. The best protection for a hedge against the gophers I find to be *faithful cultivation*.

Yours truly,

Bridgeton, Mo. Logan Sleeper.

Iverson Grass.

Mr. Colman:—I notice in the May number of the *Valley Farmer* a letter setting forth the good qalities of a new kind of grass, called Rescue or Iverson Grass. Can you or any of your readers inform me through your paper, the quantity of seed to be sown per acre to raise seed and also the quantity per acre for permanent meadow—where the seed can be obtained, and what is the price of it? I wish to put down some six acres of meadow this coming fall and wish to have the best that can be had. I have the only piece of Orchard grass in the neighborhood, and it is admired by every person that looks at it.

By giving the above information you will confer a great favor on me and perhaps many of your numerous readers. The Orchard grass seems to be but little known about here. I think if it were better known it would be cultivated more, as it is always the earliest, and yields two crops when cut for hay. And in my opinion, it far surpasses Blue grass, or any other, when wanted for grazing.

Yours, &c., R. Nicholls.

Hancocks Prairie, Calloway Co., Mo.

Japan Pea.

A new kind of pea of the above name is offered for American culture. We know nothing of it, or its history, save that it has been recommended by interested parties east of us. We have procured and planted a few seeds, which look odd enough and quite interesting, now they are five or six incheis above the ground. We shall watch with interest for the result of the experiment.

[Written for the Valley Farmer.]

CULTURE OF WHEAT.

I have frequently been requested, by my friends, to give an account of my last year's crop of wheat, the manner in which I prepared my ground, and the quantity of seed sowed to the acre; also, the time of sowing.

I had about thirty-six acres of ground sowed with Zimmerman wheat, most of which had been set with clover for three years. I broke it up in August, about ten inches deep, and re-broke it again the latter part of September the same depth, leaving deep drainage furrows, every twenty-five yards. I then harrowed the same way it was last plowed, until the ground was well pulverized and level. I then divided each land in four equal parts, by running three slight furrows or marks sufficient to sow by (as I consider deep furrows would receive too much wheat in sownig to be of any advantage to them, and would rob the ground near by, of its proportion, and by that means be injurious to both.) I then sow about six pecks of clean wheat to the acre, commencing the first of October and finishing by the tenth, if I possibly can. The reason I give for being so particular as to the time of sowing, is to meet the two extremes of the fly and freezing out. I find the above time suits my land and culture better than any other. If it was not for the fly I should always endeavor to finish sowing by the fifteenth of September (*with five pecks to the acre.*) I then harrow all the ground well after the wheat is sown. I then run the cultivator over it as particularly as if it had not been harrowed, that all the grains of wheat may receive as near as possible the same depth of covering, for we cannot expect to receive as much benefit from grain laying on the top of the ground as from that which is well covered with earth, (as is too frequently the case.) I am almost persuaded in my mind that that is one of the grand causes of so many failures in our wheat crops. That is if the ground is first well prepared to receive the seed.

I cut, threshed, and measured upwards of sixteen hundred bushels of clean wheat, from the thirty-six acres above mentioned. Most of it was sold to the Mound and Plant's Mills, St. Louis, and weighed sixty-four pounds to the bushel. The ground was not strictly measured with a chain, but as farmers mostly do, by steping and noting the number of acres in each field. I am so well satisfied there is not more land than above stated, if I were to sell my farm I would let the same fields go for the number of acres given above. I am quite sure my present crop will give me thirty-five bushels to the acre, if the season proves favorable and no disaster takes place. And part of my present crop is in the third year's wheat land, and looks nearly as well as any I have. When I fallow for wheat, I break my stubble land as soon after harvest as I conveniently can—no scratching, but turned under at least nine inches of solid earth, and flushed up with our good (God-send) plows, for we have the best in the world. And who may we thank for them? Our hard fisted and hard thinking mechanics. And may the farmers always be able in return to give them the best and finest loaves of bread in the world and a free welcome to their fire-sides, for the plow-share must be kept bright, and the sound of a hammer heard at a distance, if we expect to live happy at home, and be able to feed the suffering millions abroad. Let us not forget that God has amongst his other blessings given us one of the greatest he has ever bestowed on man. And while the hardy sons of the farmer and mechanic are striving in all honesty to make an honest living, and keep the country in peace and harmony, there is a certain class that never wielded the hammer, nor handled the plow, who are ploting the downfall of this (*our*) grand republic. I would recommend to the farmer and mechanic, and every other good man, to stand to your ports, and let the tyrant come in whatever shape he may, put him down. You have the power in your own hands, and leave your country to your children as your fathers left it to you.

Messrs. Editors, I was brought up a regular mechanic, (as the *term* is given,) and worked at the trade of gun making upwards of thirty years, but the latter part of my life, I have endeavored to carry on the business of farming, and it is for my neighbors to say how far I have succeeded in my attempts at farming.

I well know I have scattered my shot in writing these few lines, but as I am an old man, and have (*sometimes*) to use a shot gun, if the shot should be a little scattered, I trust the public will forgive me. I expect to gather up as many pigeons from my scattering shot, as those who may use even the Sharp Rifle.

OLLY WILLIAMS.

St. Louis County, Mo.

☞ A subscriber from Hamilton county, Ill., writes us that the wheat looks very bad in his section, on account of the hard winter. Peach trees are all dead, or as good as dead. Sassafras, briars and shumach, shared the same fate. Corn and oats are very late.

[Written for the Valley Farmer.]

PREPARING SEED CORN.

Messrs. Editors:—As I was preparing my corn for planting, the thought struck me that a few hints upon the subject of preparing Seed Corn might be of some advantage to the many readers of the *Valley Farmer*. Almost every farmer who raises corn to any extent has experienced more or less difficulty in getting a good stand, from various causes. In some instances from protracted cold, wet weather, the seed rots, but the most common cause is from the depredations of the crow and black bird. Many expedients have been resorted to in order to ward off these pestering lads. Some surround their fields with a woollen string some; stuff old clothes with straw and station them in different parts of the field; some hang up scare-crows of various kinds to frighten the hungry scamps away. Some, who are fortunate enough to have half a score of children, will keep the "smaller fry" in the fields watching the birds and crows away. Some soak corn in liquor and sow it about the field in order to make the black gentry drunk, so that they are easily caught and killed. Some soak corn in arsnic and scatter it about the field to poison them to death. Many other methods are resorted to, not necessary to mention here. But I prpose to give a receipt for preparing seed corn which will save all this trouble, and at the same time insure a good stand, whereas in all other methods mentioned, the farmer has frequently to replant. The plan I propose has been practiced by some of the farmers in this vicinity, and sufficiently tested by them to admit of no doubt of its answering the purposes designed. It consists simply in putting tar on the seed corn.—This renders it so unpalatable to these black scamps that they will not eat it. They may pull up two or three hills, but as soon as they find it is not good to eat they will quit, and "seek a supper somewhere else." It has another great advantage in preventing the ravages of the moles, which are very numerous in this vicinity, and which molest the corn in many places more than the feathered tribe. It also has the effect of preserving the corn from rotting in cold, wet weather, the tar forming a coat on the surface of the grain which prevents it from water-soaking.

The following is the mode of putting the tar on: Take about a peck of corn and put it in a barrel, pour on a quart of warm water, say from 80° to 100°, stir until the corn is all wet; pour off the water; put a gil of tar in a pan, hold it over the fire until it will run freely, then pour it over the corn and stir thoroughly, until each grain has received a portion of the tar; then take dry ashes and sift on and stir as before, until it becomes so dry with ashes that it will not stick to the fingers. It is then ready for planting.

I have practiced this mode of preparing my corn for three years, and have never failed of having a good stand, while some of my neighbors who neglected it, have had to replant to a greater or less extent. Joseph Gill.

Pleasant Vale, Ill.

[Written for the Valley Farmer.]

STONE FENCE.

Messrs. Editors:—In answer to an enquiry made in the March No. of the Valley Farmer, concerning Stone Wall for fence, its expense, value, &c., I will give the following:

In the New England States they have two kinds of stone wall for fence—the five feet, and the three feet, or half-wall. When the stone are so plenty as to be more than enough to make a three feet wall, they are used for a five feet wall. Five feet wall should be at least three and a half feet thick at bottom, and drawn in as it is carried up, so that when five feet high, a stone of one foot in length will cap or bind the top, leaving it straight. Three feet, or half-wall, should be laid three feet thick at the bottom, and at intervals of nine feet, posts with two holes in the top, should be inserted; the lower hole should be three feet nine inches from the ground. The holes should be made with a two inch auger, 6 inches long and 1 foot apart to receive rails after the wall is laid up. The wall should be made three feet high, and drawn in to eighteen inches at the top. The top stone should be long enough to reach across the whole and bind it fast together. This will make a good, substantial and durable fence, much less liable to be thrown down by frosts than the five feet. The advantage of a five feet wall is to get the extra stone out of the way. The expense of building a three feet wall, where stone are lying loose on the surface and near by, ought not to exceed seventy-five cents per rod for hauling and laying up. A good wall-layer will lay four rods a day of good stone, and two men and a yoke of oxen ought to furnish the layer with the stone. The writer has known men to take large contracts of three feet wall at fifty cents per rod for hauling and laying up, and five feet wall for one dollar per rod. There is one great advantage in a stone wall—it neither rots down nor burns up.

Yours truly, Clodhopper.

[Written for the Valley Farmer.]

BEES---SURPLUS HONEY.

The good, benevolent, and even the avaricious bee-keepers, no longer find their best interests promoted by cruelly taking the lives of their servants, the bees, as soon as they have collected stores sufficient to tempt the rapacious appetite. Many have learned that with proper management they will store more than a winter's supply of food; that this surplus, which is often worth more than the whole contents of a hive where the bees are destroyed to obtain their sweets, may be taken without detriment to the future prosperity of the stock. Connected with this operation is the supposition, and it is entertained by nearly all, that an expensively constructed hive is all important, or essential to success. It may be an advantage to such to learn that the common hive is all that is needed. A board top, with a few holes an inch in diameter, is sufficient, with a box of wood or glass, or simply a pail, put on bottom up. All light should be excluded. When glass boxes are used, an outside cover for that purpose is needed. Any one having bees in the common hive, and wishing some of the sweet article pure, need have no occasion to wait to get "patent fixins" to obtain it, but may go about the operation with the same, or a better prospect of success. No matter if his hive was not prepared with holes in the top before the bees were introduced, they can be made without difficulty. I make hundreds such holes annually in full hives. Some auger or bitt that will bore smoothly, is best—work carefully without jarring, and when one hole is through, introduce some tobacco smoke, and it will immediately drive every bee from the vincinity. With a pocket knife pick out the chips; lay something over this and proceed to make the rest in the same way. Half a dozen or more are better than a less number. The boxes can now be put on, but for the encouragement of the bees, stick some pieces an inch square, of new, white comb in the top, for a beginning—one edge dipped in some melted beeswax and applied before cooling, will be sufficient to hold it. A box 12 inches square, by 5 or 6 inches deep, will hold some 25 or 30 lbs. of honey. In many sections two such are filled in a season by one thrifty swarm. Boxes half or quarter this size, of the same depth, may be used, if preferred; the latter sell more readily in market, but for home consumption the larger ones are less trouble and will do just as well.

The time to put on these boxes to get them filled, I find is understood by but very few.—Certain conditions of the stock or swarm must be present, or we get no honey. First, there must be a strong family; second, a good yield of honey at the time, and the room in the hive nearly all occupied. These requisites would make success quite certain. It would be lost labor to fit boxes on a stock reduced by swarming until the few bees left could not protect their combs from the moth, or fill them with honey; or on a new swarm half full. It is difficult to give a rule that will prevent disappointment in all cases, yet it is safe to put them on whenever bees are crowded outside during a yield of honey. Old stocks will frequently fill up after casting a swarm or two, in season to store several pounds of surplus. New swarms, when full before the season of honey is over, should receive boxes. Early, large swarms are usually the chief dependence.

If a particular description of the glass boxes that I send to the New York market, is desired, I will give it at some future time.

The last summer was decidedly too wet for bees in this section. The usual quantity of honey has been insufficient to last them through the winter. It was this, or something else that caused a famine with a good many stocks that would have been safe in ordinary seasons. The continued severity of the weather made an additional loss, making the fatality of bees greater the past winter than was ever known before. Some stocks that have been fed for months, need it continued yet, occasionally. It is now the 1st of June, and notwithstanding our apple trees have been in bloom near two weeks, there has been but little chance for bees to collect honey, in consequence of wet and cold, windy weather, which also makes the prospect for fruit rather unfavorable, especially with the small show of flowers presented this year. No hard frosts lately, though we had some snow squalls on the 30th May.

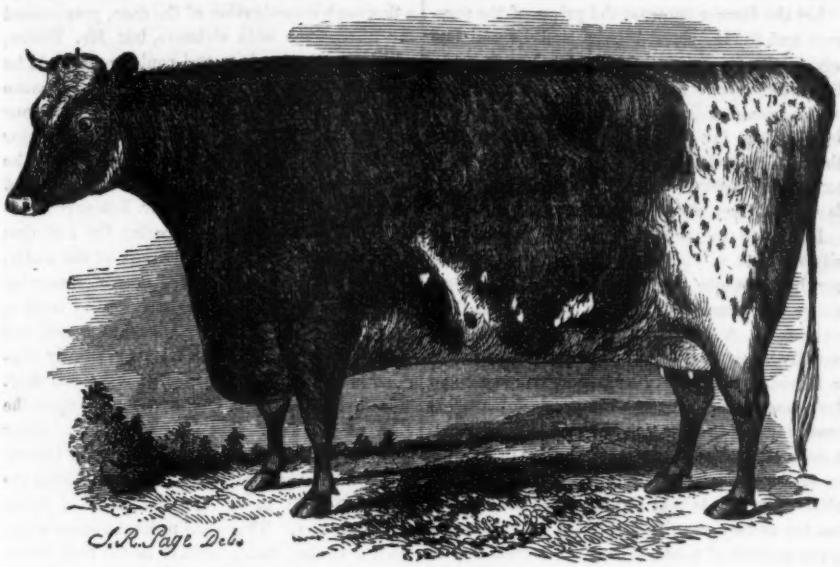
M. QUIMBY,

Author of Mysteries of Bee Keeping Explained.

St. Johnsville, N. Y., June 1856.

The author of the foregoing communication is one of the most extensive and successful Bee cultivators in the country. We speak advisedly, for we have visited his place and witnessed the operations of his interesting and numerous family. We hope our Western readers may have the pleasure of again hearing from Mr. Quimby.—EDS.

In no pursuit does intelligence pay a better percentage than in agriculture.



CHERRY 2d.—(See American Herd Book, Vol. 2, page 328.)

Eight years old. Owned by BENJAMIN WARFIELD, Lexington, Kentucky.

Red and white; bred by Benjamin Warfield, Fayette County, Kentucky; calved May 6th, 1847; got by Don John (426), out of Cherry, by Goldfinder, (2066); Stella, by Oliver, (2387); May Dacre, by Accommodation, (2907); Miss Haggin, by San Martin, (2599); the Teeswater Cow, of Kentucky, imported 1817.

1850, April 24,	roan, H.	Empress,	Kossuth, 616,	Benjamin Warfield.
1851, Oct. 18,	r. & w. H.	Annie Smith,	Renick, 903,	do
1852, Nov. 23,	r. & w. H.	Sally Smith,	do	do
1853, Dec. 13,	red, B.	Capt. Bragg;	Young Paragon, (11886),	do
1854, Dec. 1,	roan, B.	Rescue,	Young Chilton, (11278),	do

She weighed, at five years old, and in good breeding condition, 1810 lbs.

Stock Raising Department.

[Written for the Valley Farmer.]

The Best Breeds of Stock Most Profitable to the Farmer.

MESSRS. EDITORS.—I am glad to see that considerable attention is being paid to the improved breeds of stock by Western farmers. And I have no doubt that far more attention would generally be given to the matter, if the best breeds could be more easily procured. Every farmer who will give the subject any consideration, will readily see that it would be far more profitable for him to raise the improved breeds of stock, than the common breeds. And farmers, not unlike other classes, look at their best interests, and raise such crops as will pay the best profits, and will also raise such breeds of stock as will pay them best, if they can procure them. And even if the best breeds paid them no better, I am sure they would prefer to raise them, because the pleasure of raising finely formed and neat looking stock must be great, and these qualities are not often to be found in our common, scrub breeds.

Look at our alligator hogs, our raw-boned cattle, our rough made and ill-proportioned horses, our common goat-like sheep, and then ask yourself whether there is any pleasure in increasing the number of such looking specimens of the brute creation.

What a contrast should we find between two farmers, one multiplying the kinds last described, and the other, the improved breeds? As we walked over their respective farms, and looked upon their stock, what light would be shed upon our understanding? How soon would we discard all our scrub breeds, and in their stead, have those kinds which please the eye and more speedily fill the purse?

Let the farmer contrast the prices of the common and the improved breeds, and he will find which will be most profitable for him to raise. First, however, it may be well to state, and none of experience will dispute it, that the improved breeds keep far easier, i. e. consume less food than the scrub breeds. Consequently, as a matter of enconomy, it is for the interest of the farmer to have the improved breeds.

But as to the prices. Common sheep in our city markets will bring from one to four dollars per head, while the Cotswold or Southdown sheep will command from six to twelve dollars per head. A cow of the common breed will usually bring from twenty to forty dollars, while a Durham or Hereford or Devon will command from one hundred to one thousand dollars. It costs no more to raise a good breed of horses than a poor one and all know the difference in the value of the two grades in market. With hogs the chief difference is that the improved breeds fatten far easier, require less food to produce a given amount of pork, and attain a greater size.

I hope the readers of the *Valley Farmer* will take these matters into consideration, and as rapidly as they can, displace their common breeds for the pure breeds, being satisfied that they will find it greatly to their interests in every respect to do so. No part of our country is better adapted to stock raising than the West, and let us all have the best breeds. ***

Oak Grove, Mo.

[Written for the Valley Farmer.]

CAUSE OF MILK SICKNESS.

TO THE EDITORS OF THE VALLEY FARMER: I send you an account of some remarkable facts which appear to be conclusive that the milk-sickness is the result of a mineral poison, which is held in solution in the water which the animals drink.

The cases referred to occurred near Edwardsville, Madison county, Ill., and are as follows: A Mr. Foster was engaged in hauling building stone from a neighboring quarry with two yoke of oxen; the weather was warm and after loading up, being very thirsty, he drank of some clear water which he found in the crevice of a rock. His near lead ox drank the remainder of the water. On the way home, the ox was taken sick and fell, and was unable to travel farther. Mr. Foster, in his effort to relieve the ox from the yoke, was overcome, and fell also, and was unable to proceed without assistance. He was finally taken home, and medical aid procured, when it was determined to send to Alton for old Dr. Edwards, who, after a thorough investigation of the case, pronounced the disease the milk sickness, but, Mr. Foster, who was yet conscious and could speak, said he thought the Doctor must be mistaken, because he had not tasted either beef, butter, cheese nor milk for a number of years. Still the doctor insisted that it was the disease known as the milk sickness, and nothing else, and prescribed for it accordingly. Finally, Mr. Foster recovered, but the ox died. Recollecting the fact that both himself and the ox had drank of the water, Mr. Foster, together with the doctor, determined on making some experiments. They went to the pool, and dipped out a bucket of water, and gave it to a calf that had been previously confined in a stable. In a short time the calf died. They then shut up a dog, and fed it upon the flesh of the calf. The dog also died. After some days they determined on repeating the experiment, but on going to the rock, found the water had all dried up, the weather being extremely dry. They then procured some water from a spring, and placed it in the rock where it remained for a while, and then gave it to a calf that had been confined as before. This calf died also. They then confined a cat which they fed on the meat of the calf. This caused the death of the cat. More water was placed in the crevice of the rock, and after remaining for a time, was bottled and sent to St. Louis for analysis, when it was found to contain arsenic, coperas and other substances.

WM. O. MAXEY.

Bond County, Ill.

Remarks.—The death of the animals referred to above, may have been caused by arsenic, or some other mineral poison, but we very much doubt whether the disease produced was identical with the milk sickness. If the milk sickness was the result of mineral poison, the same causes would continue to operate for years, or forever in the same localities; but on the contrary we find on many farms, and in whole farming districts, which for years have been hardly habitable on account of the general prevalence of this disease, but after years of perseverance, and the wild growth has been subdued, the disease entirely disappears. This fact, aside from many other conclusive cases which have been recorded, places the question, we think, beyond a doubt that the milk sickness is the result alone of vegetable poison. Yet there is a diversity of opinion among those who admit this, what that vegetable is.

In a late number of the Ohio Farmer, a writer asserts that it is caused by the *White*

Snake Roots, and gives some very strong evidence in proof of his assertion. He says he shut two hundred sheep in one field having some woods in it, and kept watch to see if they eat the plant, which they did after the grass failed. When the lambs began to fail, they could walk but a few rods before they would begin to tremble and lay down, and after lingering a few days, would die. He then placed an old mare, perfectly sound except a founder, in the field. She would not eat it at first without cutting and mixing with oats. The third day she eat it clear, and the fourth day she died, showing the trouble plainly. On examining several other farms in the same township, where cattle and horses died during the severe drouth of 1854, the writer states he found plenty of the weed growing.

Some years since, the celebrated Dr. Drake, of Cincinnati, published a pamphlet on the subject in which the disease was attributed to the *Rhus texicodendron*, or "poison oak." There are many other observing men, who, from facts that would appear conclusive, agree with Dr. Drake. There are also some others equally intelligent and learned, who have dissented from their opinion, and assert that the poison-oak is frequently found in sections where no milk sickness has ever been known. Experiments have also been made by feeding it to certain animals, and no ill consequences produced. Mr. Thomas S. Hinde, of Mt. Carmel, Illinois, who has devoted much study and observation to the subject of milk sickness, is confident that the plant is not the poison oak. He states that he has both the poison oak and the plant to which he attributes the disease, growing in his garden, and that they are evidently of different species. Their qualities are proved to be very different, as he and others seem to have proved,—the poison-oak when eaten by cattle and other animals, occasions no bad effects, while the other plant, when fed to cows, calves and oxen, and even men, produces sickness or death. Mr. Hinde thinks the plant which produces the sickness is a *nondescript*, though he is induced to think it belongs to the genus *Rhus*, of which the poison-oak is a species.

It would seem that now, as this disease has so nearly been traced to its true origin, there would be no difficulty in establishing beyond a doubt, the precise cause of this fearful scourge. We hope that some men of science will take the matter in hand, and by a series of careful experiments with the plants referred to, put the matter beyond a doubt. This could be easily done, if once undertaken.

FINE HOGS.

While sojourning a few days at Paris, Ky., we took occasion to visit the farm of Mr. Samuel H. Clay, who is celebrated for raising the finest hogs. Since the Berkshire mania has subsided, but little attention has been paid to the breeding of hogs, either with the view to improve the stock or of maintaining any of the particular breeds in their original purity.—From a particular fancy to this most useful class of stock, we are gratified to find that Mr. Clay is an exception to this general rule. Even his kinsman, Brutus J. Clay and his numerous other neighbors, so enthusiastically and successfully engaged in breeding the best Durhams in the world, do not exercise more care, skill and judgment for the improvement of that class of animals, than Mr. Clay does in breeding swine. We examined his herd with great interest, and very much doubt whether an equal number of hogs, for size and thrift and better adapted to the legitimate business of *pork making*, in the West, can anywhere be found. Mr. Clay has tried all the various breeds that have been introduced, and has made numerous crosses with the view to improvement. He keeps a large number of well chosen breeding sows, some of them of extraordinary size, and has on hand five large, full grown boars. These he employs with the same care and judgment, with the view to improve the various *points* in this class of stock, that the best breeders of England have to improve their sheep and cattle, and the improvement he has made is as clearly and distinctly marked as in the classes we have named, considering the length of time he has devoted to the business.

We are pleased to learn that Mr. Clay is about to enter into a series of experiments that we have long been anxious to see instituted, with the view to test the comparative economy and value of feeding cooked meal over raw.—Mr. Clay has his scales conveniently arranged, and will conduct his experiment with great accuracy, and has promised to give us the result.

We have long been satisfied that an apparatus could be constructed so as to perform the cooking with such economy as to render it available to any extent and to great profit.

☞A correspondent sends us the following receipt for curing Fistula in horses: Take one half pint of alcohol, one-half pint of turpentine, and one ounce of Indigo. Mix the first two articles and dissolve the indigo in the mixture, and apply a small quantity every other day.

AMONG THE FARMERS.

A few days ago we found ourself among the cattle of old Woodford and Franklin. While looking at the beautiful animals we could not help thinking what a temptation they would have been to our venerated cattle-stealing ancestors. Indeed, we thought they were almost too great a temptation for the virtue of modern times. We were tempted to wish ourself a robber-baron with a band of hungry retainers, who on sitting down at a table, found in their plates —not beef, but the suggestive spurs. In such a case, our spurs would soon have found themselves pricking a horse towards Woodford.

But these are naughty thoughts, and ought not to be indulged. When a man suffers such thoughts to become familiar to him, who knows what he may do? Cattle-stealing had a savor of respectability in the olden time, but

"Oid times are changed, old manners gone."

We returned from Woodford without any cattle; but we have not that which our highly respected ancestors must have felt as a serious drawback to the pleasure of cattle-stealing—the fear of pursuit and vengeance. We have no dread of some fifty or a hundred bold riders from Woodford, with eyes and hands full of fire which they are in haste to transfer to our buildings.

There are few spots on this earth of ours, so beautiful as the Blue grass region of Kentucky. What scene can be more lovely than one of those rich pastures, covered with its delicate blue, the graceful trees bending over it, and the finest of cattle enjoying the shade? If any one thinks he can imagine a scene more delightful, let him try. We do not know what kind of pasture Adam had for his cattle in Eden; but if he had anything richer than our blue grass pastures, the angel visitants must have been glad to see them.

In their efforts to get the finest cattle, the citizens of the blue grass region have spared no expense. They have asked, Where may the finest cattle be procured?—not, What will they cost? We do not see how more beautiful cattle can roam the boasted pastures of England. Old Jupiter tried his hand at making cattle—making a bull of himself and a heifer of Io; but we doubt whether the white bull that "breathed saffron from his mouth," or the beautiful heifer that excited the jealousy of Juno, could claim any superiority to some of the cattle we saw in Woodford and Franklin, on the farms of Robert W. Scott. Esq., R. A. Alexander, Esq., and the Messrs. Gratz.

Mr. Scott, whose devotion to the cause of agriculture, manifested in numerous ways, particularly in his untiring efforts to effect the organization of our State Agricultural Society, gives him a claim upon the gratitude of every Kentuckian, is well known for his success in breeding sheep. His sheep are gentlemen, if we may judge by the dress; for few men or sheep are so finely clad. We saw some blankets made of their wool, which looked as if they had been made to order for Morpheus himself. We would defy any one to keep his vigils in sight of those blankets. They are covered all over with snores.

Mr. Alexander has become celebrated as an importer of cattle. He seems determined to have the finest cattle that money can buy or care can produce. We are glad to see he is devoting some attention to cattle for the dairy. We saw among his cattle several of the Alderney breed. We hope that more attention will be hereafter paid in Kentucky to the milking properties of cattle. Good beef is an excellent thing, but milk and butter are better.

The citizens of Woodford expect great things of the Chinese hemp. They believe it will produce two thousand pounds per acre on land that produces but six hundred of the ordinary kind. If this hemp answers their expectations it will be a great thing. The seed was sent in a letter to Mr. Vance, of Woodford by a Parisian gentleman. We are afraid there will be some disappointment about it. Our fears, however, have no other foundation than the general principle that "the news seems too good to be true." Everything at present is certainly very promising. In the present aspect of things, this hemp is for the hemp-growing regions the greatest discovery of the age. What would be thought of a new kind of corn producing one hundred and fifty bushels an acre, where fifty are now produced?

There is one great objection to the beautiful region which we visited. When we think of the hospitality with which we were treated, and call to mind the amiable qualities of the gentlemnn who inhabit that lovely region, we hesitate to mention this objection. We have asked our conscience to permit us to pass over the matter; but it has sternly refused. We are forced to inform the world of what we discovered. The thing must be exposed, whatever may be the consequences. If we should remain silent, the very cows of Woodford would bawl out. Well, here it is. There are seven thousand acres of land in one body on which you will look in vain for a white child! The proprietors are bachelors! They themselves acknowledge seven thou-

sand acres in this sad condition—we do not know that there are not ten thousand. We stood in the elegant lawn belonging to two of these bachelors; beautiful trees and shrubs were all around us, filled with orioles, thrushes, doves, and other birds; flowers gleamed through the foliage on every side; the birds poured forth their sweetest songs from the boughs on which they had built their nests; nimble squirrels gamboled fearlessly along the fence; in short, everything was suggestive of Eden. But alas! the garden was nothing but a wild; for no woman smiled upon it; and our friends, the hermits, had not even the grace to sigh. What is the use of sending missionaries among the heathen, when such things exist in our own midst? What particular course should be taken in this matter, we are not prepared to say; but such a state of things should not be suffered to exist a day longer. We wonder if those bachelors remember how Orpheus was treated by the Ciconian women for despising the sex. They may yet find their heads floating down some river or other, like that of Orpheus. Let them beware! **

Exhibition of Horses at the Fair Grounds of the Southwestern Agricultural and Mechanical Association, at Louisville, Ky., June 10, 11, 12 and 13.—This exhibition, both in number and quality of stock, as well as in the large attendance of visitors, far exceeded the expectations of the society. The receipts at the gates and for entries on the first day, nearly equalled the entire expenses of the fair, altho' the number in attendance was less than on either of the subsequent days. We presume that on no former occasion has an equal number of such superior horses been exhibited. A large number of premiums were awarded, and what was more satisfactory, they were so widely and uniformly distributed over the State.

On the second day, the ring of one year old colts excited the admiration of all for their superiority. There were nine entries, and it was declared by the oldest and best judges of horses, present, to be the best display of colts ever before exhibited in the State, or even in the Union, and the Marshall was so directed to announce it.

The success of the exhibition so far exceeded the expectations of the Directory that it was determined to continue the exhibition to the fourth day and to confine the display to the premium horses of three entries, for sweep stake premiums,

1st ring, stallions of every age,
2d ring geldings of every age,
3d " mares of every age.

This constituted the *summum bonum* of the horses of Kentucky, and will not easily be *surpassed* by any similar collection in any country.

[Written for the Valley Farmer.]

Management of Sheep.

Messrs. Editors.—I have been so lucky with my small flock of sheep the present season, that I thought I would send you a satement of the number of lambs I have raised, and my method of managing sheep, so that those who may think my example worth following, may profit by my experience.

My ewes are well bred, Long-wooled sheep, some of which have produced wool over twelve inches in length. They were two years old this spring, and were not permitted to go to the buck till the season after they were one year old, as I think it a bad plan to breed to or from any animal before it has attained to, or nearly to, maturity. My buck I bought of Robert W. Scott, of Franklin county. He is now two years old and yielded twelve and a half pounds of wool this shearing, and after he was sheared, weighed 203 pounds. I turned him in to sixteen ewes about the middle of October. They all proved to be with lamb and brought forth 28 lambs, 24 of which are now living, which I think a good turn out for that number of ewes, at their first lambing.

They were kept during the winter on tolerably fair pasture and were fed some corn every day, with a little fodder and hay occasionally, and sometimes, though rarely, they were fed a little oats in the sheaf. A few days before lambing time they were brought near home and turned on to a few acres of rye and meadow, and for a few weeks were fed their daily allowance of corn, but no oats. The ewes all did well and the lambs are remarkably large and healthy. Upon the whole, taking into consideration the number and quality of the lambs raised and the increased quantity of wool resulting from good treament, I think I have been amply paid for my trouble.

If you think this worthy a place in your valuable paper you may insert it.

Yours, &c., Chas. C. Le Compte.

Henry Co., Ky., May, 1856.

We are pleased to record such evidences of success—the result of proper management in the care of sheep, or any other department of farming. Our State is admirably adapted to the raising of sheep, and if attended with proper

care will be found as profitable as any other branch of stock breeding.—EDS.

[Written for the Valley Farmer.]

IMPROVED CATTLE.

MESSRS. EDITORS.—I see some very practical remarks in the May number of your very valuable paper, written by Mr. "W," upon the subject of the Improvement of Cattle. "W" writes like one who has had some experience as a breeder, and if I am not mistaken as to whom "W" is, I know him to be a man who was once a breeder of fine cattle while a resident of Fayette county, Ky. I subscribe to his sentiments, and would like to see such sentiments published very freqently, that the wayfaring man, though ever so blinded by prejudice, might have an opportunity to have the scales of prejudice removed from his eyes, that the light and truth of "W's" remarks might find a lodgement in his understanding. I feel confident that such sentiments are in accordance with those of a large number of the best breeders in Kentucky. I have had some experience in breeding Durhams, and a breeder that does not follow the suggestions of "W" I think will in all probability, 'advance backwards,' (to use a common expression of this country.) Hon. H. Clay once owned a bull, Lord Althrop that was a very common looking animal, although said to be a good breeder. There was "Oliver," a common looking bull, that was a good breeder. There is also "Old Renick," a very extra breeder, yet a very common animal to look at. I could name others, but I think it unnecessary, because every man who has had any experience in breeding from and to pure Durhams can make calculations with a great degree of certainty as to what sort of a calf will be produced; therefore, the greater amount of certainty when bred to pure, or thorough bred. As to the common remark in this country, "Why they are, or all my cattle are Herd Book cattle," there is too much *gammon* in it. Any man that will take the trouble to examine the English Herd Book can tell whether certain pedigrees are good, and this every man should do. If this course was pursued, we should be better informed, and would not be so subject to imposition. I will give you an illustration or reference or two. Take the Fourth Duke of York (10167), and Flora, by Shakspeare (120) 62d; Lady of the Lake, by Reformer (2505) 2d; Rose of Sharon, by Belvedere (1406) 3. Red Rose 5th, by 2d Hubback (1434) 4. Red Rose 2d, by His Grace (311) 5. Red Rose 4th, by Yarbonough (705) 6. The American Cow, by Favorite (252) 7, by Punch (331) 8, by Foljamby (263) 8, by Hubback (319) 9, by James Brow's Red bull (97). C.

[Written for the Valley Farmer.]

Dairy Business in the West.

MESSRS. EDITORS.—Why is it that more attention is not paid to the Dairy business in the West? Farmers in the Eastern States have amassed fortunes by their dairies. At this time, it is considered by the Eastern farmers that there is no branch of farming that pays so well as that of the dairy. If farmers at the east can amass fortunes at this business certainly western farmers can, far more speedily, and I will give you my reasons.

Land in the West, as a general rule, is far cheaper than at the East. There is at least, a difference of one half in the price—so that but one half the capital here would be required for the business. The land here is also far better—not requiring as much labor or expense to adapt it for the Dairy. The winters here also are not as long, and the cows do not require near the hay and feed to take them thrcugh the winter that is required at the East. There, the cows must be stabled about six months in the year, and the expense of keeping them is great. The farmer must work hard all summer in order to get a supply of food for his stock during winter. These are all important considerations, and they certainly favor the Western farmer.

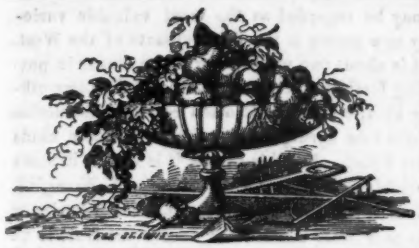
Cheese and butter both command a higher price in the West than at the East. In fact the West is in a great measure dependent upon the East for these articles. We pay a tribute to Eastearn dairymen to the amount of thousands of dollars annually. Shall we continue to do so? is the question. Shall we not rather be independent of the East, and keep the money thus expended, among our own people? I hope that many large dairies may be started among us this year, and that each year shall increase their number. The prices of dairy products are highly remunerative and the business can be entered safely with a certainty of good returns.

SIGMA.

St. Louis County, May 1856.

Cure for Lockjaw in Horses.

MESSRS. EDITORS.—I give you my method of curing the lockjaw in horses. It has been found successful wherever tried. It is this:—Bleed the horse in the third bar of the mouth, and drench with strong salt water. This method has been known to be successful when all others have failed. T. B.



Horticultural Department.

Description of Apples for Cultivation in the West.

The following is the description of the Apples published in the list for cultivation in the West for the March number of the Valley Farmer.

Early Harvest.—American, and one of the best and most beautiful early apples. It thrives well on our rich western lime stone soil. As an early market fruit it well repays a careful culture. It is a variety that should be included in every collection, however small. Form round, above medium size; skin very smooth, of a bright straw color when ripe. Flesh very tender and juicy, with a rich, sprightly sub-acid flavor; excellent for the dessert and for cooking.

Summer Rose.—This variety is not a profitable market apple, but as a dessert fruit it is highly esteemed. Fruit rather small, roundish, conical. Skin smooth, of a rich yellow, blotched and streaked with red; flesh very tender, and of a fine, agreeable sub-acid flavor. Begins to ripen in July, and continues for several weeks.

Red Astrachan.—Said to be of Swedish origin. Fruit of great beauty, and of rather large size, rather conical. Skin of a bright deep crimson, with a thick bloom like a plum. Flesh white, rather acid. Ripens two weeks after the Early Harvest. The tree is a strong grower, and a good bearer.

Black's Annett.—But little is known of the origin of this fruit. It is said to have been cultivated in Indiana by a Mr. Black, and hence its name. Size medium. Skin bright yellow; flesh tender, of an acid and pleasant flavor. Good bearer.

Finley.—But little is known of the origin of this apple; it is admired by those who cultivate it, as an excellent market fruit. In some localities it is liable to the objection of falling from the tree. Color yellow.

Bohannon.—This variety was introduced from Virginia in the early settlement of Kentucky, by a nurseryman by the name of Bledso. It has been confined to the collection of Col. Lewis Sanders, of Grass Hills, Ky., until within a few years, but its frequent appearance upon the Horticultural societies' tables in Louisville and Cincinnati, have brought its valuable qualities into notice. As a market fruit it is appreciated on account of the long period in which it is in use, ripening from August to October. Fruit above medium size, roundish, tapering suddenly to the eye, prominently and unevenly ribbed on its sides. Skin smooth, thin, of a delicate straw color, sometimes with a delicate blush on the side next the sun. Flesh tender, of rich subacid flavor. Excellent for eating and cooking.

Rambo.—A native of the State of Delaware. It succeeds in almost all soils where the apple is grown, and is one of the best fruits of its season. It is a universal favorite in the West, and too well known to require further description.

Fall Pippin.—The Holland Pippin and several other apples of the same class, are cultivated in the West under this name. The true Fall Pippin is superior to all of them, and is not so liable to fall prematurely as the Holland Pippin, from which it is supposed to be a seedling raised in this county. It succeeds well in the West upon a high dry soil. Fruit large, roundish, a little inclined to be flat. Skin smooth, of a yellowish green, becoming more yellow when fully ripe; flesh yellowish, tender, and of a rich aromatic flavor, second only to the Newtown Pippin. Tree is a strong grower. September to November.

Maiden's Blush.—A very beautiful apple, originated in New Jersey; although not of the first quality in richness of flavor, it is a tender and beautiful fruit, and uniformly productive. Skin a clear yellow, with a rich colored cheek. Flesh white, tender, with a sub-acid flavour. It is excellent for drying, beginning to ripen in August and continunig through October.

Yellow Bellflower.—This is a large, handsome and excellent winter apple, and in no place have we seen it in greater perfection than in the West. It originated in Burlington, New Jersey. The tree is usually a vigorous grower, but is inclined to yield under its own weight, and become crooked. Fruit very large, oblong, and a little irregular, tapering to the eye. Skin smooth, pale yellow, sometimes with a flush next to the sun. Seeds in a very large, hollow core. Flesh tender, juicy, crisp, with a sprightly, subacid flavor. Season, November to Jan-

uary. We regret to notice that the leaves of the Bellflower have been attacked with the blight, which first appeared on the leaves of the Pryor's Red, and which promise to be fatal to that variety.

Jonathan.—This is an apple of great beauty, and of superior richness of flavor. In some locations in the West, it proves more valuable than in its native soil. It originated in New York, and was first brought into public notice by the late Judge Buel. Fruit of medium size, regularly formed, roundish-ovate, or tapering to the eye. Skin thin and smooth, nearly covered by lively red stripes, deepening into dark red on the side next the sun. Flesh white, very tender, and juicy, with a rich sprightly flavor. Tree an early and abundant bearer in the west.

Yellow Newtown Pippin.—This apple, when in perfection, in its good qualities in unsurpassed by any other variety; it is extremely fragrant and high flavored. It is a good keeping fruit, and retains its flavor to the last. Fruit from medium to large, roundish, a little angular and generally more irregular in its outline than most other apples. There are two varieties of this fruit; the Yellow and the Green; but when both are fully ripe it would require a good judge to distinguish them. Recently considerable quantities of the Newtown Pippins have been shipped to England, and sold at high prices. The tree does not succeed well on all soils, but requires a strong deep, warm soil, and good and constant cultivation, and high manuring.

Pryors Red.—This is an old favorite fruit in the West, and for a time was the most popular market apple. There are two varieties under this name; one a large russett apple with a few dashes of red on the side next the sun; the other not so large, striped and nearly covered with red, both possessing peculiarities of fruit, wood and leaf only common to themselves. Fruit of each tender, rich and of a subacid flavor, more like a pear than any other apple. The large yellow or russett variety is the best of the two. Tree rather a weak or slow grower. Recently whole orchards of this variety have been attacked with a kind of leaf blight in the form of a parasitic fungus; it appears on the leaves in little brown spots, extending to a bright yellow at the edge. Within the last year or two the disease has appeared on the Bellflower, Carolina, and other kinds. It may pass off, and the trees recover, but if not the cultivation of the varieties subject to it will be abandoned.

Rawles Jannet.—This apple, although inferior in flavor and richness to many other kinds, may be regarded as the most valuable variety now grown in the fickle climate of the West. It is about two weeks later in the season in putting forth its leaves and blossoms than any other kind, and hence it often escapes destruction from late spring frosts when most other kinds are killed. For this reason it is known in some neighborhoods under the name of *Neverfail.* Tree is a vigorous grower, and has a tendency to over bear, which often causes the fruit to be small and inferior in quality. The trees should be cultivated, and the fruit thinned, or its bearing diminished by cutting back the branches as recommended for the Peach tree in a former number of the Farmer.

To the foregoing list, for larger collections, we have added the six following varieties; not, however, equally valuable in all locations; while there are many other varieties in certain soils and situations that are good, which the preference of cultivators will induce them to select.

White June Eating.—This fruit is small and valuable only on account of its early maturity, it being the earliest variety cultivated.

Keswick Codlin.—An English cooking apple, which succeeds admirably in most situations. With good cultivation, it is full medium size, and a prolific bearer. It is like the Bohanon, a long time in use. Skin greenish yellow. Flesh yellowish white, juicy, with a pleasant acid flavor. From June to November.

Summer Queen.—A large valuable market apple, ripens about midsummer; it is used both for the dessert and kitchen. Skin striped and clouded with red upon a yellow ground. It is a good bearer.

Pennsylvania Red Streak.—This is rather a coarse apple, but most excellent for cooking and drying; also, good for eating. Fruit large size, handsomely streaked upon a yellow ground; a strong grower and good bearer.

American Golden Russett.—Sometimes called *Bullocks Pippin.* This is a most delicious tender apple; in texture quite resembling the Pryors Red, but superior to it for the dessert. It is a small fruit, and is more recommended by its good quality than for its beauty. Tree thrifty and a profuse bearer.

Rhode Island Greening.—This is a great favorite in the east, and generally succeeds well, in most situations north of Central Ohio, but prefers a sandy or gravelly soil. Farther south it is liable to fall from the tree prematurely.—Fruit large, a little flattened, skin smooth, of a dark green, becoming full green when ripe, fine for cooking and the dessert.

Spring Exhibition of the Cincinnati Horticultural Society.

In addition to the attraction afforded by the National Democratic Convention in Cincinnati, the Cincinnati Horticultural Society commenced its spring exhibition on Tuesday, the 3d of June, and continued through the week. Feeling some interest in the latter, we took advantage of the facilities now extended by the Jeffersonville and Ohio and Mississippi Railroads, to be present at the opening of the exhibition. The location was a favorable one—on a large vacant lot adjoining the residence of the late Judge Burnet, on Seventh street, a central and pleasant locality, and removed from the noise and confusion of other portions of the city. The exhibition was held in three neatly constructed pavilions, affording ample room for the various departments of the exhibition, and the numerous crowds of citizens and strangers who congregated daily and nightly to enjoy the delights of the occasion. The variety of fruits and flowers was not so large as we have seen at some of the Society's fall exhibitions, yet it was excellent considering the season. The good taste and judgment displayed by Messrs, Heaver, Sayers, Jackson and other prominent cultivators, in supplying and arranging the plants, cut flowers, fruits, &c., never fail to render the exhibitions of this Society occasions of great interest and attraction to all lovers of the beautiful. Among the new plants, we noticed a considerable number of seedling Calceolaria's, propagated by Mr. William Heaver. They were variegated and spotted in the most beautiful manner, with almost every conceivable shade and color upon the same plant.

The collection of fruits and vegetables, of course, at this season, was not large. There were some specimens of Pie Plant of enormous dimensions, particularly Cahoon's Seedling, from Kenosha, Wis. Some of these stems measured three inches wide, and some of other varieties as many feet in length.

Quite a number of varieties of apples were on the tables, among which were the white and yellow Bellflower, Pryor's Red, Newtown Pippin, and other varieties which had been kept in Schooley's patent meat and fruit preserver.—They were apparently as fresh and as sound as they were in the month of January, but we noticed that they will not bear long exposure to the hot atmosphere. Mr. T. V. Peticolas also presented Rawle's Janett, Pryor's Red, and Romanite apples in a remarkable state of preservation.

The collection of strawberries was large, and the specimens were said to be as fine as have ever appeared on the society's tables. The interest in this department of horticulture, has this season attracted an unusual degree of attention, and some severe controversy betwen different members, of the society has occured, growing out of the relative merits of Hovey's Seedling and McAvoy's Superior. Hovey's Seedling, grown by Mr. John C. Youtcy and some other cultivators on the New port side of the Licking, were of extraordinary size. This variety, as grown upon the virgin soil in that section for the last two years, for size and productiveness, have surpassed any of that variety that we have seen from any other locality.

Whether this superiority is to be attributed to any peculiarities of location and soil, is still a matter of discussion among the members. A Committee of the Society was appointed to visit the gardens and grounds of some of the best growers on both sides of the river, in order to throw some light on the question. The Committee have taken nearly the whole week for the examination, but the grounds have suffered so much for the want of rain, it is not an easy matter to judge of the relative value of the different varieties. We accepted an invitation to accompany the Fruit Committee to some of the gardens in the neighborhood of Clifton, but here, too, the strawberry crop has been cut short by drouth. Clifton contains some of the most highly improved and beautifully cultivated country seats to be found in the United States. The improvements, too, have been made and are kept up at an immense expense; and, although upon rather a more democratic scale, they will not suffer in comparison, in beauty of landscape, and in the order and neatness in which they are kept, with those on some of the best English estates. The vineyard of R. Buchanan, Esq., is well worth a visit to see. Mr. B. bestows uncommon care upon his vines, and besides the pleasure it affords, the profits are amply remunerative.

On a former occasion, this spring, we visited several gardens and strawberry fields in the vicinity of the city. In the garden of A. H. Ernst, Esq., we saw nearly every variety of strawberry cultivated in the West. The beds were all in excellent order, and just at that period affording the best opportunity for comparison, and from what we there saw, Longworth's Prolific strawberry, all things considered, promised to be the most productive and valuable. It is a strong and vigorous plant, bearing perfect blossoms, with the fruit upon high, strong stalks. The flavor of the fruit, however, is

hardly equal to some of the other varieties.

We give below, the awards of the Fruit Committee:

STRAWBERRIES.

Best six varieties—Hovey's Seedling, Longworth's Prolific, Gennessee, Washington, McAvoy's Superior, and Monroe Scarlet, one pint each, to W. E. Mears.....$3 00
Second best six—varieties Prolific, Superior, Hovey's Seedling, Gennessee, Hudson and Burr's New Vine, one pint each, to T. V. Petticolas... 2 00
Best pint of McAvoy's Superior, to John Johnson, 2 00
Second best pint Hovey's Seedling, to Wiley Bates, 1 00
Best display in quality and varieties McAvoy's No. 1, do Extra Red, Longworth's Prolific, and McAvoy's Superior, to D. McAvoy..... 4 00
Second best display in quantity and varieties, a new Pistillate Seedling, Excelsior, a new Seedling, Hermaphrodite and Prolific, to Schnike... 2 00

SPECIAL PREMIUMS.

Best two quarts Longworth's Prolific, to F. G. Cary $5 00
do do McAvoy's Superior, to F. G. Cary 5 00

GRAND SWEEP STAKE PREMIUM.

Best four quarts of Hovey's Seedling, over all others, to J. C. Youtey.....$10 00

GRATUITIES.

Best two quarts Hovey's Seedling, to J. C. Youtey, 5 00
For Hovey's Seedling, to J. C. Youtey..... 2 00
For Hovey's Seedling, to Mackintosh..... 1 00
For McAvoy's Superior, to A. J. Wheeler..... 1 00
For Longworth's Prolific, to S. Rintz..... 1 00

A seedling strawberry from T. L. Weltz, from the Hautboy, of good flavor, productive and uniform in shape, but small. Seedling strawberries from Geo. H. Heinsohn, of Jefferson co., Ky., generally of good flavor, particularly a Hautboy of a rich aroma and taste, but quite small.

CHERRIES.

Best pint—Early May, to M. McWilliams.....$2 00
Second pint do do to Wm. Orange..... 1 00

APPLES.

For good natural preservation of Apple's, Priors Red, Romanite, White Pearmain and Yellow Newtown Pippin, to T. V. Petticolas—Gratuity, 1 00
For excellent natural preservation of apples, Baldwin, Rawle's Janett, and Jonathan, to Mottie, Gratuity..... 1 00

A number of apples preserved by an artificial process eight months beyond their season, were exhibited by John C. Schooly. Their flavor was either not so well preserved as the above, or they had not been put up, or subjected to the plan, when in good condition.

Bellflowers preserved by peculiar process, by Peregrine Phillips, back of Newport, Ky., in fine condition, except somewhat affected by frost.

TO MAKE PURE APPLE WINE.—Take good, new cider, fresh from the press; dissolve in it sixty pounds of common brown sugar to each fifteen gallons of cider, and let it settle. Then put this fifteen gallons into a clean barrel, and fill the barrel up with clear cider, to within two gallons of being full; leave the bung out for 48 hours; then put the bung in, with a small vent. Let the barrel stand a year—the wine is then fit for use. It needs no racking. The longer it stands the better. We give the above receipt on the principle on which Moses tolerated concubinage. It is so much better to drink wine without poisonous drugs, that costs but 20 or 25 cents a gallon, than the vile poisons which cost from $3,00 to $5,00 a gallon, that we think the change would be an improvement. The *best* way, *we* think, is to drink no wine at all, pure or impure.—*Ex.*

[Written for the Valley Farmer.]

Dwarf Pear Trees and Layer Trees.

EDITORS OF THE VALLEY FARMER:—In the March number of the Farmer, you have an article on Dwarf Pear Trees, in which you say, "The enquiry is frequently made: can the cultivation of Pears on Quinces be made profitable?" This question you answer in the affirmative. My own opinion for a number of years has been that Dwarf Pear Trees, *trained and cultivated strictly as Dwarf*, are not, and cannot be made profitable.

In giving you my reasons for this opinion, I shall also endeavor to show that the Layer tree, or the tree growing on roots of its own variety, is the best that can be produced.

As I have never had confidence enough in Dwarf Trees to engage in their propagation, I have to make up my mind on the subject by what others have written. I will here give a few extracts from what others have said on the subject. Mr. B. P. Johnston, secretary of the N. Y. Agricultural Society, in the Journal of that Society says: "I found at the West, in many places, the dwarf pear on quince stocks dead; the quince dying out. This extends all over the country; in the neighborhood of this city, very great loss has been sustained, especially on light soils. A gentleman at the West suggested that those on the light soils, so far as he was advised, died; but we find at the East, that they have failed on all varieties of soils: May not the difficulty be that the pear shoot being the more rapid grower, exhausts all the nutriment, and the quince cannot save enough to expand its roots. We have heard this suggested. But suppose they do succeed—at best, they produce but little, and one good flourishing pear tree, like the French trees in Detroit, and others of our old varieties in this State, will produce as many pears as a hundred of these."

A correspondent of the Boston Journal says: "Having been for a few weeks among the fruit growers of Massachusetts, I notice that an error prevails among them in the treatment of their dwarf pear trees particularly in planting them, and to so great an extent that many persons have almost abandoned their culture, although they are really the most valuable trees. In planting, it should be borne in mind that the Angers Quince will not endure the winters of New England, and that it is the only variety on which the pear succeeds; in all quinces the borers work, and this variety is even more subject to them than the fruit bearing kinds. Mr. C. M. Hovey (a pomologist of considerable note,)

says: (Horticulturist vol. 7, page 476,) "Very few, either European or American Pears do well on Quince stocks."

At the meeting of the Ohio Pomological Society last January, as given in the Ohio Farmer, Mr. Ernst, of Cincinnati, the President of the Society, said, "that he could not go into the work of cultivating Dwarf Pear Trees with the enthusiasim that some manifested. He had been looking to results of Mr. Parsons; and had understood they had proved indirectly an entire failure." Mr. Ernst refers, I suppose, to Mr. Parsons, of Long Island, N. Y., who has been experimenting considerably with Dwarf Pears. Mr. Elliott, of Cleveland, said, "that in order to get pear or quince well, it must have good food regularly, and be nursed as carefully as a woman tended her child." In the article referred to in the Valley Farmer, it is said, "We do not believe that there is one dwarf pear tree in a hundred now planted throughout the country, that has received the care and cultivation necessary to insure any degree of permanent success." But it will be said that the above is only one side of the question, and that dwarf pear trees rightly managed have done well. Let us now consider the right way of cultivating them, as given by those who write in their favor. In addition to "giving them good food regularly, and nursing them as carefully as a woman tends her child," Col. M. P. Wilder, a Boston Pomologist, in his remarks which are quoted in the article in the Valley Farmer, says: "It is absolutely necessary that the quince stock be planted entirely below the surface of the ground." And the correspondent of the Boston Journal, in the article that I have before partly quoted, says that "when dwarf pear trees are planted, the place of grafting should be three inches below the surface of the ground." In this way, he says "the difficulties before mentioned are all obviated, and another advantage obtained which is all important—that is, the production of fibres above the place of grafting, which will spread plentifully through the ground, and sustain the trees to a great number of years; even if the quince roots were entirely removed, it will give them a more vigorous growth, and double or treble the amount of their production." Col. Wilder further says, "I have pear trees on the quince root, which are twenty-five years old, and which produce annually a barrel or more of fruit each, and for aught that I can see, they are destined to survive as long as any that I possess on the pear root. These may, and probably have, in some instances, thrown out roots from the pear stock, but whether this be so or not, instances are not rare where such trees have attained in France the age of more than a hundred years." And Col. W. tells us of a quince tree that is forty years old, but he does not tell us of one that has attained that age, which has a pear grafted on it above ground. Mr. Downing, in his work on fruits, (7th edition, page 553) says: "The average life of the pear tree, when grafted on the quince, is reduced from fifty years—its ordinary duration on the pear stock, to about a dozen years. This is well known to every practical gardener, and it arises from the want of affinity between the quince stock and the pear graft." And from what has recently been written I should not suppose that one pear tree in a hundred, that depended entirely on the quince root, attained the age of a dozen years. From the above, we learn that in order to have the dwarf pear do well, it is "all important" and "absolutely necessary" that they be planted so deep that they can be established on roots from the pear graft. "But when this occurs," (says the Horticultural Editor of the Western Agriculturist) "the tree ceases to be a dwarf, and assumes the character of a standard." And he might have added, that it also assumes the character of a layer tree, being nourished by roots of its own variety.

The above are some of my reasons for believing that dwarf pear trees, *cultivated strictly as such*, have not been, and will not be made profitable. And now I will give some reasons for believing that the layer tree, or the tree growing on roots of its own variety, (in whatever way it may be propagated,) is the best that can be produced. And one reason is, that *nature demands* that each variety of apple, pear, &c., should have not only good roots, but roots of its own peculiar variety. There is as great a dissimilarity in the roots of the layered apple trees, as there is in their stocks or leaves, each variety having a set of roots bearing a family resemblance, but differing more or less from that of other varieties. Hence, I infer that the top needs just such roots as nature has provided for it, and the roots need just such leaves as nature has provided for them. Therefore, if we use the grafting knife unnecessarily, we hinder, rather than help nature in her operations in producing us choice fruit. It is well known that Pomologists do not agree in regard to the influence of the stock and root, upon the fruit that is grafted on any other than its own variety. From what I have read and considered, I believe that the seedling root does have more

or less influence on the grafted fruit. In some rare instances, that influence may be good for the fruit, but in an indiscriminate grafting upon seedling stocks, I believe the consequence is a constant deterioration of our choice varieties. But I will give a few extracts from what others have said on the subject. The late A. J. Downing, in his work on fruits, expresses the opinion that grafted fruit is never influenced by the stock on which it grows. But afterwards he seems forced to admit the contrary. On page twenty-five of his book, he says: "A slight effect is sometimes produced by the stock on the quality of the fruit. A few sorts of pear are superior in flavor, but many are also inferior when grafted on the quince." Mr. Downing also says in his Horticulturist (vol. 7, page 104,) that the quality of the fruit grafted upon the choke cherry is deteriorated by the stock.

Mr. Lewis F. Allen, of Black Rock, N. Y., in his Notes on Pears, in the Horticulturist (vol. 7, page 123) says he has found the Winter Nelis pear, better on Quince stocks than on pear, and asks, "Is not this a *queer* sport of nature, that some kinds of pear should be better on the quince—a low, scrubby, acrid, fruit-bearing thing—than on the pear stock itself?" I would answer that if such be the *fact*, that any choice variety of pear is improved by depending on the roots of the quince for substance, then it is "a queer sport of nature." But I have doubts of this being the fact, and I will give my reasons. It will be understood that the pear stock referred to by Mr. Allen is the *seedling* pear stock, upon which the Winter Nelis was not so good as when grafted on the quince. We must here consider the Winter Nelis Pear in three different conditions. First, on the seedling pear stock, where it is good, and, secondly, on the quince, where it is better. But again, we must consider that dwarf pear trees, by different modes of planting, make two sorts of trees. One with the graft inserted into the quince above ground, remains strictly a dwarf tree. And another planted so deep that it becomes established on the roots that shoot out from the Pear, and "when this occurs it ceases to be a dwarf." Now, the question is, which of these two last positions did Mr. Allen's dwarf pear tree occupy? If it were that of the pear graft entirely above ground, then the "queer sport of nature" remains to be accounted for. But if the Winter Nelis was planted so deep that it would send out its own roots to draw from the bosom of mother earth that peculiar nourishment which its variety needed, then it had the advantage of the same variety that was grafted upon a seedling stock, and had to depend for sustenance on a set of pear roots, which nature had prepared for a different and inferior variety. And as Mr. Allen is a Pomologist that seems to be very much at home among pears and pear trees, we may reasonably suppose that he practices that deep mode of planting which Col. Wilder and others say is "all important" and "absolutely necessary," in order to have them do well, and if this be the case, the improvement of his pear, grafted on quince stock, is accounted for.

One of the former Editors of the Prairie Farmer, who has filled the editorial chair with much honor, has given considerable attention to the influence of the stock on fruits grafted on it. In vol. 9, page 332 of the Prairie Farmer, he says, "There has sometimes been a dispute as to whether the stock will so influence the graft as to change the character of the fruit, some persons denying that such is the fact. We have before us, at present, a very forcible proof of this influence in some samples of apples from the orchard of Mr. F. W. Miner, of this county. They are three lots of the Winter Pearmain, grown on three different stocks, accompanied by seedlings from each of the stocks. Not only do the seedlings differ from each other, but the different lots of Pear mains are almost as widely diverse in size, color, and general appearance. As they are not in eating condition, we are unable to tell what the difference may be in flavor." We had no doubt of this fact before; but others have. In the Nov. number for 1848, page 341, he says: "Some fruits are so easily affected by their stocks, that you can seldom find two of the same name in market, which shall bear a resemblance to each other sufficient to mark second cousins." In the June number for 1845, speaking of the Spitzenburg apple, he says: "This standard apple is so well known, that no particular description of it is necessary. There are three or four varieties of it, called Esopus, Flushing, Pownal and Newton Spitzenburg; but these are not more different from each other than any one of them will produce, when grafted into stocks of different character. We find the color of the Esopus, for instance, described differently by different authors; a fact about which there is nothing strange, when we reflect that at any fruit store, a dozen barrels of Rhode Island Greenings may be found, all differing in size, color and taste from each other; and some of them so dissimilar that the family resem-

blance is hardly detected." In the March number for 1852 of the P. Farmer, page 117, after speaking of the dissimilarity that there was in apples of the same variety, he says: "We attribute this to the modifying power of the stocks on which they are grafted; and thus their deviation from the true type of the fruit is more and more decided, the further we go with our budding and grafting."

Having now said all that my limits will allow on the influence of the stock on the fruit grafted upon it, I will consider briefly the important question, whether the Layered tree will be likely to last as long, and produce as well as the grafted? On this point we want all the facts we can get, and I believe it would be well for the cause of Horticulture if Pomologists would consider this subject, and give us facts on this point as fast as they can be brought to light. Mr. Downing, in his work on fruits, page 553, says, "It is a well established fact that a seedling tree, if allowed to grow on its own roots, is much longer lived, and often more vigorous than the same variety, when grafted upon another stock; and experience has also proved, that in proportion to the likeness or close relation between the stock and the graft, is the long life of the grafted tree." From the above we understand the reason given why the seedling is always much longer lived than the grafted tree, to be the general want of affinity between the graft and the stock into which it is inserted. But it will at once be seen that there is the same unison—the same unobstructed flow and interchange of sap and nourishment between the top and the root of the layer tree, that there is in the seedling. At the meeting of the Ohio Pomological Society last January, Mr. Batcham referred to the endurance, age, and great size, to which dwarf pear trees, so only in name, attain in France. In what I have before quoted from Col. Wilder, after he had told us that it is "absolutely necessary" that the pear graft on quince stocks be set entirely below the surface of the ground in order that they may do well, he says, "Instances are not rare where such trees have attained in France the age of more than a hundred years." Now, can we suppose that these pear trees that have attained to a great size, and to the age of more than a hundred years, have all this time been drawing their nourishment from quince roots, and are supported by quince stock? I think that there can be no doubt but that these trees have long since been established entirely on their own roots. And if so, they are of the same character of Layer trees, and I think it worthy of special notice that they have attained to more than twice the age which Mr. Downing says is the ordinary duration of the pear, when grafted on to the pear stock. And from the honorable mention that is made of the size, age, and endurance, of these so called dwarf pear trees, we should suppose they gave no present signs of decay, and that they were not cumberers of the ground, but were satisfactorily productive. I have an apple that is growing on roots of its own variety, that is seventeen years old, which will bear favorable comparison for the quality and quantity of its fruit, with other trees of the same age and variety, that are growing on seedling roots. On page 17 of Mr. Downing's book on fruits, he says that "Dr. Van Mons, a distinguished horticulturist of Belgium, considers the practice of grafting on small pieces of roots as the most complete of all modes, with regard to the perfect condition of the grafted sort; because the lower part of the scion being thus placed in the ground, after a time it throws out fibres from that portion, and so at last is actually growing on its own roots." After Dr. Van Mons had spent nearly his whole life in producing new and choice varieties of fruit, he recommends that we get them "a growing on their own roots." And his reasons for giving this advice, may be seen in the foregoing considerations. It will be readily seen that the desirable object of having a tree "actually growing on its own roots," is at once and perfectly attained by layering. And there are also various other ways by which trees may be grown on roots of their own variety. If those who are engaged in root grafting will cut their scions about six inches long, and set them in the middle instead of the end of their pieces of root, and then set the whole length of their graft in the ground, they will throw out roots the first year from the gratt so that they can be taken up, and the piece of seedling root cut off, and when re-set in the nursery, they will of course be growing entirely on their own roots. And if trees produced in this way, will retain all their choice qualities, and the period of their duration be lengthened out to that of a seedling, then surely there is a great and two-fold object gained by letting nature furnish each of her varieties (as far as consistent) with just such a set of roots as they need.

The foregoing are some of my reasons for believing that a Layer tree, or a tree that is growing on roots of its own variety, is the best that can be produced.

JOHN SLATER.

St. Albans, Hancock Co., Ill.

The Home Circle.

THE SISTER.

No household is complete without a sister.—She gives the finish to the family. A sister's love, a sister's influence! what can be more hallowed? A sister's watchful care! can anything be more tender? A sister's kindness!—does the world show us anything more pure? Who would live without a sister? A sister that is a sister in fidelity, in purity, in love, is a sort of guardian angel in the home-circle. Her presence condemns vice. She is the quickener of good resolutions, the sunshine in the pathway of home. To every brother she is a light and life. Her heart is his treasure-house of confidence. In her he finds a fast friend, a charitable, forgiving, tender, though often severe friend. In her he finds a ready companion. Her sympathy is open as day and sweet as the fragrance of flowers. We pity the brother who has no sister, no sister's love. We feel sorry for the home which is not enlivened by a sister's presence. A sister's office is a noble and gentle one. It is hers to persuade to virtue, to win to wisdom's ways; gently to lead where duty calls; to guard the citadel of home with sleepless vigilence of virtue; to gather graces and strew flowers around the home altar. To be a sister is to hold a sweet place in the heart of home. It is to minister in a holy office. Let every sister meditate on what she is, and what she ought to be; on her office, her duty, her pleasure, her life. It is hers to be a model and set an example of innocence, virtue, cheerfulness, patience, and forbearance, to be the smile and light of home and its circle of loved ones.

SCOLDING.

Of all the disagreeable habits the world was ever tormented with, scolding is the most annoying. To hear a saw filed, to hear a steamboat whistle, to hear an ass bray, to hear a peacock scream, or an Indian yell, is music compared with it. Since we were a little child we have always felt a mortal abhorrence to scolding. And if we had been scolded as some children are we know not as we should ever have been good for anything. Our sensitive spirit would have rebelled and wrought itself into a hateful, discordant thing. It is no wonder many children are bad. The good is all scolded out of them. It is stunted or killed by early frosts of cold, icy, scolding. What a frost is to the spring buds, is scolding to all the best things in the child-heart. Scolding folks at home! How miserable! Lightning, thunder, hail, storm and winds, let them all come, rather than a hurricane of scolding. Let all the powers that be wage a war of kindness on all the scolders, that they may be overcome with a better spirit.

"LILLA LYNWOOD," a new contributor, has our warmest thanks for the following beautiful article. We are happy in being able to publish such excellent sentiments as her article contains, for the benefit of the readers of the "Home Circle." We hope our readers will have the pleasure of hearing from "Lilla" often.

[Written for the Valley Farmer.]

DOING GOOD.

It is a glorious night! The moon is high in the heavens, shedding a soft, serious light over the fields and gardens and upon the gently waving tree tops, upon many a little village that lies upon the prairies or among the hills, and many a lovely country house with open fields around it, and in the distant woods whose shadow falls darkly upon the ground.

It is a glorious night, and Lucy Marvin sits at her window, with no light in the room but the sober moonlight, gazing sadly out at the shadows that lie yonder by the wood.

What is she thinking of? Listen!

"I know it is all true," she is saying. "I know I am doing nothing; but how can I help it; how can I do good? I cannot be a briliant woman, and startle the world by some new and great scheme of benevolence. I cannot be a missionary or do anything else of that sort.—What can I do? I don't know any poor people that are in want of food or clothes. Father says we all ought to do good; but how can I? I have no opportunity for doing good."

Think, Lucy Marvin, think! No opportunity for doing good? Think. Look around you! Is there nothing for you to do; no one to whom you have a mission? In your own family circle, is *there* nothing for you to do?

Your mother has many cares, and you may do much to lighten them. She is often weary, and then you may seek to take her place in the family, and so give her an opportunity for rest.—Nor is this all you may do for her—give her your love and sympathy; they will do much to make her happy, and so shall your mother's life be brighter than it has been for many a year.

You have brothers and sisters, and for them

you may do something. Deal gently with their childish waywardness, and seek to win their love. A time may come when temptation shall assail them fiercely, and then, by the power of love your hand may hold them back from many a fearful sin.

There are times when nothing in the house seems to go right—when everybody seems to feel out of humor with onesself and everybody else. Then, although you may feel desponding and out of spirits yourself, yet try to put away such feelings and put on a cheerful face. A gentle word, a smile from you will do much towards driving away the cloud.

It often takes but a little thing to make people happy. A word, a smile, a look, may lift a heavy load from off a sorrowful heart.

Oh, Lucy, you have many opportunities for doing good, and if you improve them—if you thus live for the good of others—ever seeking their happiness, and not your own, you will be loved by all around you, and will be doing good as truly as if you had done something which the world would call great.

LILLA LYNWOOD.

Jacksonville, Ill.

[Written for the Valley Farmer.]

Ought Social Laws to be Regarded?

There is a certain class of people constantly complaining of the restrictions of society and the inconveniences and restraints of civilized life. One would think from their conversation, that the "march of mind" was accompanied by a corresponding diminution of enjoyment, and that savages were the happiest of human kind.

It is the little affairs and observances of society that weigh so heavily upon them, the trivial, everyday ceremonies of life get to be so irksome to their would-be untrammeled spirits. Greater inflictions, violations of great principles and real duties they bear more patiently, but *those* are so *wearing*.

Let us consider the claims that society has upon us, whether they are such as demand our allegiance. Though we may not all cherish the disinterested devotedness of a Mr. Merdle, for this institution, still we cannot deny its authority.

Society—the combination of men for mutual safety and assistance—is essential to the existence of man. It is a glorious structure, composed of the civilized nations of the earth, which the world's ages of human wisdom and might, activity and suffering have reared. We owe it veneration and submission. While we enjoy its blessings we are bound to yield to its requirements—if need be, to sacrifice our personal wishes and convenience to the common good. If we are not willing to do this, if our minds are of that independent stamp, that we cannot, without cramping their energies, conform to common usages and social laws, we have no right to make war against them, and injure the social compact from which we may derive benefit, but should repair to some region of "continuous woods," without the pale of civilization, where we may indulge our love of freedom unrestrained.

Since the very existence of society is dependent on the maintainance of the principles of law and order which it has established, our duty of strict and unconditional obedience to these, is paramount to our obligation to any other human institution. But the Divine Law, high above all man-made laws, still rules over us, and *its* behests no others may gainsay. We need not mistake our way here; it is marked by the broad distinction between the Divine and the Human, and lighted by the explicit declarations of the Scriptures.

We may "pay tribute to Caesar," but not "do homage to false gods." A.

YOUNG MEN PAPERS---NO. 7.

Not intellectual attainments, not moral worth, not business acquirements, not industrious habits, are enough for a true young man. He must have something more; something to soften, quicken and empower his character; something to produce genial and social motives. He must possess the social affections in pure and quick activity. He must wear in his bosom a genial and loving heart. He must possess the home loves in all their strength and beauty. For his parents and superiors in age and wisdom he should have a deep respect—a filial affection. He should honor age and worth. He should be silent and respectful in the presence of experience. But especially for his parents should he cherish the tenderest regard. It will subdue and elevate his character. It will win him the respect of all the good. It will prove a shield against evil and quicken and elevate all his better impulses. We have never known a young man turn out very badly who cherished a tender regard for his mother. There is no affection holier than the boy's love for his mother. There is nothing more manly than such an affection. To be without it is to lack one of the essentials of a good character and a harmonious soul. The young man who loves his mother has a talismanic voice in his heart, ever urging him to

be upright and honorable. To dishonor one's mother with a base life, or a mean character, or groveling habits, or low aims, is a bitter reproach to any young man. We see not how one can respect a mother properly and be a mean, dishonorable man. It seems to us that the thoughts of a mother's care and toil, her kindness, her solicitude and her love, must ever be a guard against evil. How can one associate with evil companions, indulge in base practices or hateful passions, with thoughts of his mother in his mind? We can scarcely explain the moral perverseness of some young men. We can do it on no ground but that they have forgotten to love and honor their parents. Then the love of home and its associations of brothers, sisters, and friends should be cherished. Nothing is healthier to the youthful mind than good, social affections. Young men sometimes deem it unworthy to be tender and affectionate, to have hearts quick to love and eyes easily bedewed with tears. There never was a greater mistake. It is the soul of manliness to be large and tender-hearted. Even womanly tenderness is noble in man. Strength and tenderness make a noble pair. They should be united in every young man's character. The whole nation is elevated by generous affection. A warm heart fires the whole soul. Let parents endeavor to cultivate the affections of their sons. Let brothers and sisters strive to love each other. Let young men remember that they can never be true men till they can love with right good earnest all the objects of natural affection. The great want with many young men is the want of cultivated, social affections.

HOME GRATITUDE.

It is natural for men to feel grateful for favors done them. It is right and proper that they should. It is one of the best evidences of a good character. It is sweet, it is refreshing to meet with a truly grateful spirit. But how many there are who exhibit much gratitude away from home and little or none at home. It is too true of us all that we have too little home gratitude. We thank strangers most cordially, even for a smile. We overwhelm our neighbors with grateful expressions for little favors, but we seldom have a thank or a compliment for home favors. A wife may toil her fingers off in loving interest for her husband and he is as churlish, fault-finding and ungrateful as a boor. He never thanks her for anything. He never thinks a thank. All she does for him he accepts as though she was obliged to do it for him—as though she were his slave. And let her do her best amid a thousand discouragements she has only gruff words or stolid indifference. A husband may be full of generous affection, and spend his life in kind offices for his wife, and she be always dissatisfied and complaining at that. She has no thanks for all his pains to please her. She feels as though he is in the fault all the time that she has not this and that and the other, that some neighbor has. She blames him for all the troubles of her unchaste, ungrateful and complaining spirit. So children have no thanks for each other, or their parents, or for servants, or friends at home, who do for them. And parents often have as few thanks for their children when they do good deeds for them. It is a lamentable fact that the most of people have but little gratitude for home favors. They seem to think that home friends are obliged to do for them—that they are only doing their duty when they are making sacrifices for them. Well, so they are doing their duty. And shall we not be grateful to them for this?—How much more cheerfully would they do their duty if we were truly thankful for it? Grown up brothers and sisters can seldom live pleasantly together because they expect too much from each other, and give too little. They make all possible demands of each other for favors, without thinking to be grateful. This is the common fault of homes. Only here and there is there one free from this fault. Let people at home be as thankful for the good they receive at each others hands as they are to strangers for similar favors, and how well it would be for them and for their homes. We cannot be too grateful to our best friends. We cannot be too thankful for what our beloved ones do for us. Let us be generous and feel emotions of gratitude for every kind word, for every obliging act, every noble generosity of our home friends.

BREAD.

Good bread is one of the essentials of good living and health; and it does not a little for the peace of a household. It makes all feel about right to sit down to a meal and find the bread of the best quality. But wry faces are often made over bad bread. And what a mortification it is to the house wife to set before her family unpalatable and unwholesome bread.—And yet there is much poor bread eaten all over the country. It is the one thing more poorly made than anything else, as a general rule. There is only here and there a good bread maker. It is raised so much as to be sour, or else is not well raised, or badly baked, too salt

or too dry, or the raising has killed the natural taste of the flour, or it is shortened with lard or something else to make it unwholesome. We have no particular way of making bread to recommend. There are many ways by which good bread may be made. There is more in the making than in the way. There is no one kind of raising that is infinitely superior to any other. The use made of it is the main thing.—Never let bread raise too much, for the whole process is destructive to the natural properties of the flour. It is a fermentation, the first process of decay. Let the raising be done in as short a time as possible, and all the better if it can be done while baking.

Though we do not propose a way, we do propose a *kind* of bread. Of all the kinds of bread we think that made of unbolted wheat flour is best. It is best because it has all the wheat in it, contains more of the elements needed by the system than superfine flour, is easier digested, is shorter and sweeter, and is less concentrated, and when masticated is not so doughy and tough. The juices of the stomach more readily permeate it, which renders it much more easily digested. The whole bolting process is wrong. The wheat as God made it, well ground, is better than it is after it goes through the bolt. Superfine flour is too concentrated, that is, it contains too much nutriment for its bulk. The stomach requires coarse food, and it must have it or it will not long be healthy. Feed animals on concentrated food and nothing else, and we know how quick they fail. Feed men on rich food and the result is the same. They become puny, dyspeptic, pale, weak, and after a while generally diseased. We have used the wheat meal bread for years, as our principal bread, and would not be deprived of it for the best farm in the western country. It is raised, generally, with the common yeast powder, sweetened a little with molasses, and salted. If it is shortened at all, it should be but little, and that with cream; mixed a little thicker than can be stirred with a strong spoon, but not thick enough to be moulded. It should be mixed as quickly as possible and put into the oven in all haste. Care should be taken not to burn it and yet to bake it well. That is our bread. We usually eat it three times a day, and have never failed to enjoy perfect health when we used it. We esteem it above price as an article of diet, and recommend it to everybody. *

CHEERFULNESS.

There is nothing more genial than true cheerfulness. It is favorable to health and peace, friendship, favor, fortune, and longevity. *

DOMESTIC RECEIPTS.

How to Keep Butter.—Take good butter, made any time during the summer or fall months and pack it in stone jars within an inch of the top; fill up with salt and cover with a piece of stout domestic cloth dipped in melted beeswax and tied down tight with a cord well waxed; dig a hole in the bottom of the spring-house where the jar will be covered with running water of an equal temperature. The butter will keep without any perceptible change. The water should be some inches deep over the jar. W. L. S.

Sausage Meat—*How to keep fresh.*—Pack the meat in stone jars until nearly full, then fill the jar up with melted lard; cover with a linen cloth, then tie a brown paper over the top.

Mince Pies.—Meat, finely chopped, 5 lbs., good apples 7 lbs., sugar 3 lbs., rasins 2 lbs., currant jelly 1 lb., butter 4 oz., mace or cinnamon 1 oz. When this is prepared make a crust of two-thirds the usual quantity of lard, and one-third of fat salt pork well chopped; all of which should be rubbed in the flour, and wet with cold water. Bake in a slow oven one hour.

A Certain Cure for Rattlesnake Bite or Spider Sting.—Take the yolk of an egg, put it in a tea cup, and stir in as much salt as will make it thick enough not to run off, and spread a plaster and apply it to the wound, and I would insure your life for a sixpence. The subscriber has tried the above remedy in a number of cases, and never knew it to fail.—P. Prettyman, M. D.

How To Keep Smoked Hams.—Hams can be secured and sweetly preserved through summer by packing them in cobs. First a layer of cobs in the bottom of the cask; then hams and cobs until you finish the whole. Be particular that they do not come in contact with each other.—Unbroken ones selected answer best. It will be necessary to take them out once in summer and give them a dry rubbing. Your cask should stand upon a bench in a cool, dry cellar. Having packed in this way, the cobs absorb the heat and air sufficient to keep them fresh and fine.

Preservative against Moths.—A small piece of paper or linen, moistened with turpentine, and put into a bureau or wardrobe for a single day, two or three times a year, is a sufficient preservative against moths.

Excellent Hominy Bread.—Break two eggs into a bowl and beat them from five to ten minutes. Add, by continually stirring, a half-spoonful of table salt, four or five spoonsful of hot hominy, reduced nearly to the consistency of thick gruel with hot milk, one large spoonful of butter, and a pint of Indian meal squeezed dry. Make up the mixture into small loaves or round cakes one and a half inches thick, and bake in an oven.

Editor's Table.

THE SEASON AND THE CROPS.

Taking the wheat-growing States together, from all we can learn the prospect still favors an abundant harvest. There are some few counties in Ohio, Kentucky and Tennessee where the wheat crop has suffered from the dry, cold weather, and in some instances, from the insect. In these counties the grass will be light, and unless rain soon falls, oats will be too far advanced to be benefited and will fall below a third of a crop. The section which has suffered most from drouth is confined to the northern portions of Kentucky and the southern section of Indiana and Ohio. Some of the counties in this range have been favored with occasional light showers.

On the 28th and 29th days of May quite severe frosts occurred over a considerable extent of country embraced by Kentucky, Indiana and Ohio, which materially injured potatoes, corn and some of the more tender garden vegetables. In some instances we notice the leaves on the forest trees were killed to the height of eight or ten feet. Corn on many of the bottoms was cut quite to the ground, and in some instances has been plowed up and replanted, but generally, it is rapidly recovering, and considering the state of the weather, presents a healthy appearance; and we venture to predict an abundant crop of the great substantial staple.

Kentucky Blue Grass.

During the month of June we spent a number of days in the central counties of Kentucky, in the midst of the best blue grass region. At this period, these great pasture fields present a most marked contrast with their appearance but a short time previous. The rich, luxuriant carpet of living green has given place to the rapid ripening of the seed stems, which now everywhere present the bronzed appearance of illimitable wheat fields just ready for the harvest. At this time the seed gatherers are busy "stripping" the seed. This was formerly done between the thumb and fingers of the hand; then hand-combs were introduced, with which one man can strip from eight to ten bushels in a day. More recently as the value of this grass has become known in other Western States, more rapid methods of gathering the seed by machines, have been introduced by mechanics, for horse power. The most efficient of these, when properly constructed, is Gage's patent Clover and Grass Seed Gatherer. This is a machine four feet wide, on wheels, with a rotating cylinder containing six combs, which by a very simple cam motion, gathers the seed and discharges it in the box behind.

After the seed passes into the milky state cattle and horses become fond of it and eat it with great relish, and it is very fattening. In a few days after the seed ripens, the seed stems fall, giving place to a renewed growth of green blades, which constitute the chief support of the stately Durhams during the remainder of the season.

Kentucky State Agricultural Society.

On the 21st of May a convention of delegates representing the various sections of the State, assembled in Frankfort, for the organization of a State Agricultural Society, under the charter passed at the late session of the Legislature. The society was organized by the election of the following officers.

President,
BRUTUS J. CLAY, of Paris, Ky.
Vice Presidents,
ROBERT W. SCOTT, of Frankfort,
WILLIAM BELL, Owensboro'
L. W. POWELL, Henderson.
Directors.
LABAN J. BRADFORD, Augusta,
LUCIUS DESHA, Cynthiana,
HARRISON TOMSON, Winchester,
J. B. O'BANNON, Williamsons,
JAMES R. HUGHES, Springfield,
DANIEL W. JONES, Danville,
JOHN W. SHARP, Bowling Green,
RICHARD A. BACON, Paducah,
E. O. HAWKENS, Russellville.
Treasurer,
W. W. MITCHELL, Paris.
Corresponding Secretary,
ROBERT W. SCOTT, Frankfort,
Recording Secretary,
W. C. LYLE, Paris.
Executive Committee,
B. J. CLAY, W. C. LYLE,
W. W. MITCHELL, C. T. GARRARD,
SAMUEL H. CLAY.

Under the provisions of the Charter the State is divided into three districts, and the annual exhibitions are to be held in succession in each of these districts. The first exhibition will take place in Paris, Bourbon county, on the last day of September, of the present year, and will continue five days. A liberal list of premiums will be adopted.

We are glad to learn that it is contemplated to establish at Frankfort, a depository of botan-

ical, geological, and mineralogical specimens and books, seeds and plants, for preservation or for distribution among the members of the society.

St. Louis Agricultural and Mechanical Association.

It is with pleasure that we refer to the proceedings of this Association. The Directors have displayed a most commendable zeal, and withal, the greatest prudence and judgment in the management of its affairs since its organization. Much difficulty was experienced in finding suitable grounds for the annual exhibitions, but the Directors were determined not to purchase till they did find such a tract of land as would, in their judgment, answer for permanent improvement, and subserve the best interests of the Association. At length, however, a tract of fifty acres, belonging to Col. John O'Fallon, was examined and in the judgment of the Directors was just the place for the permanent fair grounds of the association. It was purchased at a cost of fifty thousand dollars. It lies near the city, possesses fine shade trees, and is most admirably adapted for fair purposes. It is contemplated to supply it with water from the reservoir which supplies the citizens of St. Louis with water.

The President of the association, J. R. Barrett, Esq., is now on a visit to Kentucky and Ohio, for the purpose of examining the various fair grounds in those States. Upon his return a large force will immediately be put at work in order to prepare it for the first annual exhibition, which will be held five days, commencing on the 23d day of September next.

It is contemplated to have one of the largest as well as most magnificent fairs ever held in the great Valley of the Mississippi.

Ten thousand Dollars have been appropriated for premiums. Some of the largest premiums ever given in the United States have been offered.

The time of holding the fair is singularly auspicious; for on the week following, the State Fair of Illinois will be held at Alton—but 20 miles distant by river or railroad; the week following this, the Missouri State Fair will be held at Boonville. These fairs succeeding one another as they do, will be the means of drawing such a concourse of people as has never been witnessed in the West. The premiums are offered to competitors from every State, which will induce the owners of fine stock from all sections of the Union, to be present with their best breeds, as by one trip they can take in all three of these fairs. Hundreds will be present to purchase stock, and it behooves those who have it for sale to be present, as they will never again have such an opportunity of attending three of the greatest fairs in the Western country in successive weeks and at one journey.

We regret to learn that it is contemplated to hold the State fair of Kentucky commencing on the last day of September, as it conflicts with the time of holding the Illinois State Fair. We hope that it is not too late to change the time of holding the Kentucky State Fair. We know that many of the stock growers of Kentucky would like to be here, but they cannot and attend their own State fair. Many of the best stock growers in Kentucky have been appointed judges of stock, &c., for the St. Louis Ag. and Mech. Assoc., to be held this fall, and we need their experience and services. We hope that the Directors of the Kentucky State Agricultural Society will, if they consistently can, change the time of holding their exhibition this fall.—Many who will be present here, would also be glad to attend the State fair in Kentucky.

NEW SUBSCRIBERS.

We are happy in being able to state that our proposition to furnish the seven remaining numbers of the Valley Farmer for the year 1856, for 50 cents, met with unexpected favor. It being a very busy season of the year for farmers, we did not expect they would find time either to subscribe or solicit subscribers. But in this we were mistaken. The farmers of the West appreciate a good agricultural paper, and are generous and philanthropic enough to aid it, not only by their own subscriptions, but also by soliciting their neighbors and friends to subscribe for it. We believe that we have not a subscriber but who is truly a friend to our journal and would speak a good word for it, whenever an opportunity occurred. The flattering testimonials which we have received are proof conclusive of the fact.

We have received large additions to our list from Missouri, Kentucky, Iowa, Illinois, Tennessee and Arkansas. In all these States the Valley Farmer has a large and constantly increasing circulation. We return our grateful thanks for this last evidence of good will on the part of our patrons. It will induce us to put forth renewed exertions for their benefit. It is not yet too late to subscribe. We will still send seven numbers commencing with the June number, for the sum before mentioned.

State and County Fairs.

In our next number we shall publish a complete list, so far as received, of the time and place of holding all the State Fairs and also of all the County Fairs of Kentucky and Missouri, and we would be obliged to the officers of the different societies if they would send us a copy of their premium lists with time of holding their fairs. For fairs in Kentucky, please address H. P. Byram, Louisville, Ky., and for Missouri, address Norman J. Colman, St. Louis, Mo.

FINE SHEEP.—Those in want of fine sheep we would refer to the advertisement of Mr. Robert W. McMillan, of Bourbon county, Ky. A most beautiful sample of the wool from a Cotswold of Mr. M's herd, may be seen at the office of the Valley Farmer. On our next visit to old Bourbon we shall examine these sheep and other superior stock of the farmers of that section, when we shall speak more fully.

STIRRING THE SOIL.—The cultivator is one of the modern implements and is one of the most useful of any introduced. In all cultivated crops, as soon as the soil is sufficiently dry, after a heavy rain, break the surface with the cultivator and keep the earth mellow. This will insure clean crops, and is a sure remedy against long continued drouth.

ST. LOUIS MARKET.

ST. LOUIS. June 25, 1856.

Flour—$5 25@$5 50.

Grain—Wheat ranges from 85c to $1 10, as to quality; Corn 34@36c; Oats 40c; Barley in demand and ranging from $1 40 to $1 75 as to quality; Rye 65c; Beans $2.

Dried Fruit.—Dried apples range from $1 25 to $1 50; Peaches $2@2 25 ℔ bushel.

Seed—Flax firm at $1 65; Clover $8 50 to $9 ℔ bbl; Timothy $2 50@$3 00.

LOUISVILLE MARKET.

LOUISVILLE, June 25, 1856

Flour—Superfine in lots $5 25@$5 50; retail $6 ℔bbl

Grain—Wheat $1@1;10. Corn 33c. Oats 25c. Rye 50 cents ℔ bushel.

Fruit.—Dried apples $1 00@$1 25. Dried peaches $1 50@$1 75. Green apples $2@$3.

Seed—Hemp $1 25; Orchard and Herd $2 00; stripped Blue grass 90@$1 00, clean $1 50; Timothy $3 50 ℔ bushel; Clover $5 50@$9 50 ℔ bushel.

Beeves—$3 20 to $5 30 gross; Sheep $2 to $3 ℔ head; Hogs 4@5c gross.

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Per annum in advance $1; Six Copies $5; Ten Copies $8; Thirteen Copies $10; Twenty Copies $15. Also one copy free of charge to any one sending us a club of ten or more subscribers, for one year.

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One page, one insertion $10; half page $6; the same rates for three insertions. All over three insertions, half these rates. One square, one insertion $1; One square one year $10.

Persons residing in Missouri and contiguous States, will address NORMAN J. COLMAN, St. Louis, Mo. Office in St. Louis, South west cor. Chesnut and 2d Sts.

Persons residing in Kentucky and contiguous States, will address H. P. BYRAM, Louisville, Ky.

CONTENTS OF THE JULY NUMBER.

Agronomy 202
Chinese Hemp 204
Red Clover—varieties; Culture of Buckwheat 205
Brandy, alcohol and paper from sugar beets 206
Clover Seed 207
Gardening 208
How to make the best Produce 209
Cisterns and cistern building; Hay loading machine 210
Clover hulling machines; A little excursion 211
Hedge fences; Iverson grass; Japan pea 212
Culture of wheat 213
Preparing seed corn; Stone fences 214
Bees—surplus honey 215

STOCK RAISING DEPARTMENT.

The best breeds of stock most profitable to the farmer 216
Cause of milk sickness 217
Fine hogs; Cure for fistula 218
Among the farmers 219
Exhibition of horses at Louisville, Ky; Management of sheep 220
Improved cattle; Dairy business in the west; Cure for lockjaw in horses 221

HORTICULTURAL.

Description of apples for cultivation in the west 222
Spring exhibition of the Cincinnati Horticultural Society 224
Dwarf pear trees and layer trees 225

HOME CIRCLE.

The sister; Scolding; Doing good 229
Ought social laws to be regarded; Young men papers—No. 7 230
Home gratitude; Bread 231
Cheerfulness; Domestic receipts 232

EDITOR'S TABLE.

The season and the crops; Kentucky blue grass; Kentucky State Agricultural Society 233
St. Louis Ag. and Mech. Assoc.; New subscribers 234
State and county fairs; Fine sheep; Tall blue grass; Stirring the soil; Markets, contents, &c. 235